STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 147644

TO: Marcela Cordero Garcia **Location: 3c35 3c18** **Monday, March 28, 2005** 1654 **Case Serial Number: 10/681827**	**From: Paul Schulwitz** **Location: Biotech-Chem Library** **REM-1A65** **Phone: 571-272-2527** **paul.schulwitz@uspto.gov**

Search Notes

ACCESS DB # 147644

FOR OFFICIAL USE ONLY

PLEASE PRINT CLEARLY

Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: MARCELA M CORDERO GARCIA Examiner # : 80381 Date: 3/12/05
Art Unit: 1654 Phone Number: 2-2939 Serial Number: 10/681,827
Location (Bldg/Room#): REM 3C35 (Mailbox #): 3C18 Results Format Preferred (circle): PAPER DISK
****

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: DIPEPTIDE PHENYL ETHERS

Inventors (please provide full names): SEE BIB DATA SHEET

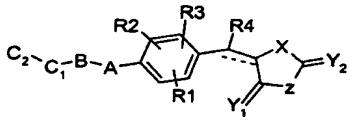
Earliest Priority Date: 10/7/03

Search Topic:
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only ***Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.***

PLEASE SEARCH COMPOUND OF ~~FORMULA I~~, WHERE:

Novel dipeptide phenyl ethers of formula (I)



WITH: **X=S; Z=NH; Y_2=O; Y_1=O; R_1, R_2, R_3 and R_4=H; --- is absent; A=O; B=p-phenyl; C_1=-NH-CH(CO_2CH_3)-CH_2-; and C_2=the amino acid histidine bonded through the carboxyl end.**

↓

IF NO HITS PLEASE SEARCH BROAD CLM 1

NOTE: PLEASE SEARCH NPL & MARPAT

THANKS, Marcela

****

STAFF USE ONLY

Searcher: _____
Searcher Phone #: _____
Searcher Location: _____
Date Searcher Picked Up: _____
Date Completed: 3/28
Searcher Prep & Review Time: 15
Online Time: 15

Type of Search

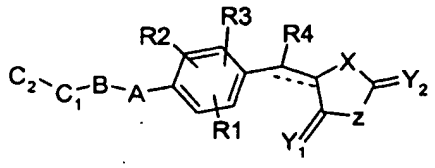
_____ NA Sequence (#)
_____ AA Sequence (#)
4 Structure (#)
_____ Bibliographic
_____ Litigation
_____ Fulltext
_____ Other

Vendors and cost where applicable

700.65 STN _____ Dialog
_____ Questel/Orbit _____ Lexis/Nexis
_____ Westlaw _____ WWW/Internet
____ In-house sequence systems
____ Commercial ____ Oligomer ____ Score/Length
____ Interference ____ SPDI ____ Encode/Transl
_____ Other (specify)

Claims:

1. Novel dipeptide phenyl ethers of formula (I)



(I)

their derivatives, their analogs, their tautomeric forms, their stereoisomers, their polymorphs, their pharmaceutically acceptable salts, their pharmaceutically acceptable solvates, wherein -- -- represents an optional double bond; X and Z may be same or different and independently represent oxygen, sulfur or NR_5, wherein R_5 represents hydrogen or linear or branched alkyl group provided both X and Z are not same when they represent oxygen or sulfur; Y_1 and Y_2 may be same or different and independently represent oxygen, sulfur or NR_5, wherein R_5 represents hydrogen or linear or branched alkyl group; R_1, R_2, R_3 and R_4 may be same or different and independently represent hydrogen, halogen, hydroxy, nitro, cyano, formyl, mono-, di-, or unsubstituted amino, linear or branched alkyl, linear or branched alkoxy group; A represents oxygen, sulfur or NR, wherein R represents hydrogen or linear or branched alkyl; B represents a bond or substituted or unsubstituted aryl, heterocyclyl or heteroaryl ring of 5 to 14 carbon and hetero atoms; C_1 and C_2 may be same or different and independently represent an amino acid or a derivative thereof and are linked through -NH- of C_1 and –CO- of C_2, or through –CO- of C_1 and –NH- of C_2; B is directly linked or linked through alkyl or alkylene groups of 1 to 4 carbon atoms to the α-carbon of C_1.

2. A compound of formula (I) according to claim 1, wherein the group represented by B is selected from aryl such as phenyl, naphthyl; heteroaryl ring such as pyridyl, pyrrolyl, thiazolyl, indolyl, imidazolyl, furyl; heterocyclyl ring such as piperazine, morpholine, piperidine, pyrrolidine.

3. A compound of formula (I) according to claim 1, wherein the amino acids represented by C_1 and C_2 are selected from alanine, glycine, arginine, asparagine, cysteine, cystine, glutamic acid, glutamine, histidine, isoleucine, leucine, lysine, methionine, ornithine, proline, serine, threonine, tryptophan, tyrosine or their derivatives.

4. A compound according to claim 3 wherein C_1 and C_2 are linked through –NH- of C_1 and –CO- of C_2.

5. A compound according to claim 3 wherein C_1 and C_2 are linked through –CO- of C_1 and –NH- of C_2.

STIC SEARCH RESULTS FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact ***the searcher or contact:***

Mary Hale, Information Branch Supervisor
Remsen Bldg. 01 D86
571-272-2507

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1610*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC-Biotech-Chem Library Remsen Bldg.

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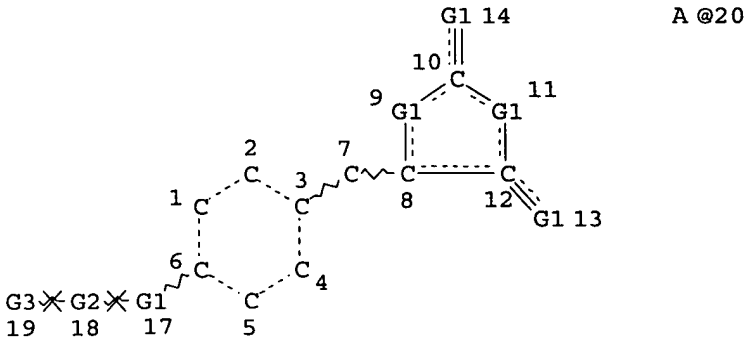


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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  24

STEREO ATTRIBUTES: NONE
L5          107 SEA FILE=REGISTRY SSS FUL L3
L6           42 SEA FILE=REGISTRY ABB=ON  PLU=ON  L5/COM
L7           10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6


=> d l7 ibib abs hitstr 1-10

L7   ANSWER 1 OF 10  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2004:780554  HCAPLUS
DOCUMENT NUMBER:          141:301422
TITLE:                    Preparation of heterocyclic ligands for
                          acid-stabilized insulin analogs
INVENTOR(S):              Ostergaard, Soren; Olsen, Helle Birk; Kaarsholm, Niels
                          C.; Madsen, Peter; Jakobsen, Palle; Ludvigsen, Svend;
                          Schluckebier, Gerd; Steensgaard, Dorte Bjerre;
                          Petersen, Anders Klarskov
PATENT ASSIGNEE(S):       Novo Nordisk A/S, Den.
SOURCE:                   PCT Int. Appl., 473 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004080480	A1	20040923	WO 2004-DK158	20040311

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: DK 2003-365 A 20030311
US 2003-455400P P 20030317

OTHER SOURCE(S): MARPAT 141:301422

AB Novel ligands for the His-B10 Zn2+ sites of the R-state insulin hexamer that are capable of prolonging the action of insulin prepns. are disclosed. A mixture of 4-aminobenzonitrile, sodium azide and ammonium chloride in DMF was heated at 125° for 16 h. The cooled mixture was filtered and the filtrate was concentrated to give 5-(4-aminophenyl)-2H-tetrazole. This was used as the ligand for His-B10 Zn2+ sites of the R-state insulin hexamer.

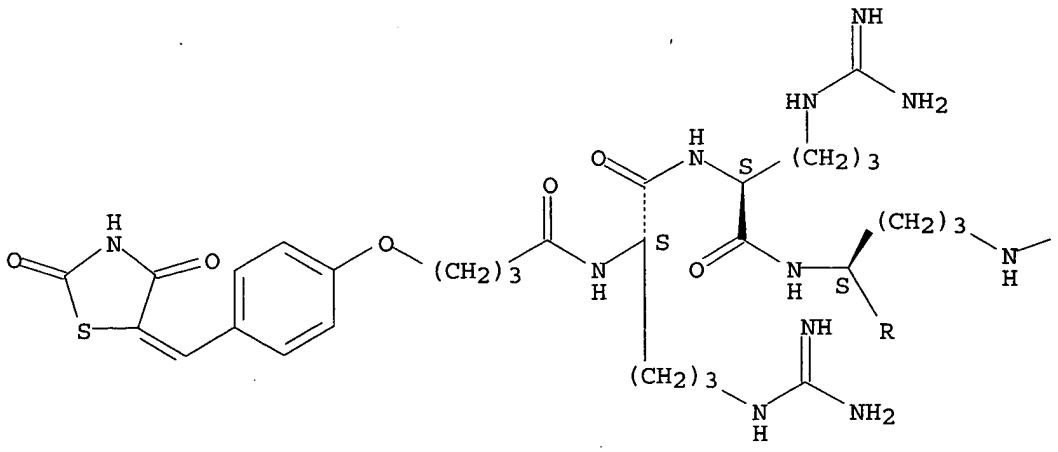
IT **503829-76-3P 503829-77-4P 503829-78-5P**
503829-79-6P 503829-80-9P 503829-81-0P
503829-82-1P 503829-83-2P 762267-92-5P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heterocyclic ligands for acid-stabilized insulin analogs)

RN 503829-76-3 HCAPLUS

CN L-Argininamide, N2-[4-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenoxy]-1-oxobutyl]-L-arginyl-L-arginyl-L-arginyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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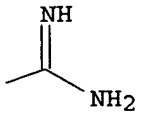

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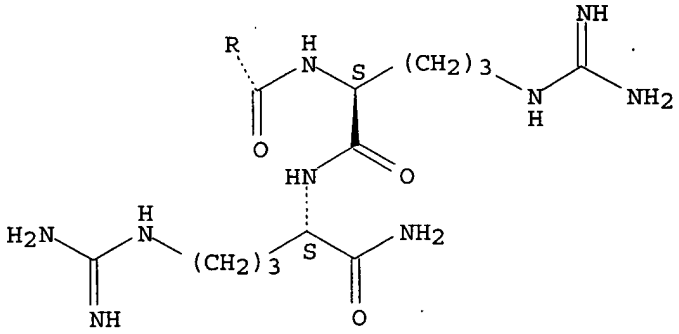

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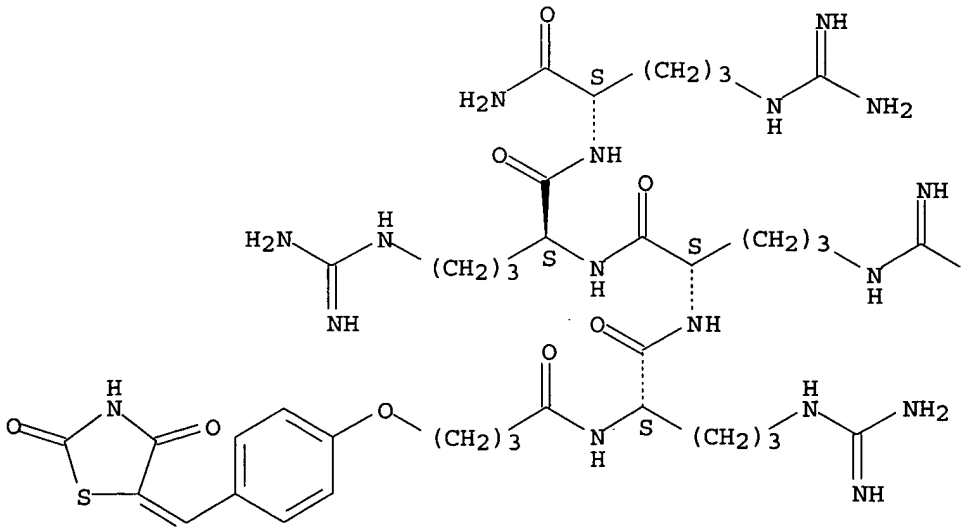
Absolute stereochemistry.
Double bond geometry unknown.



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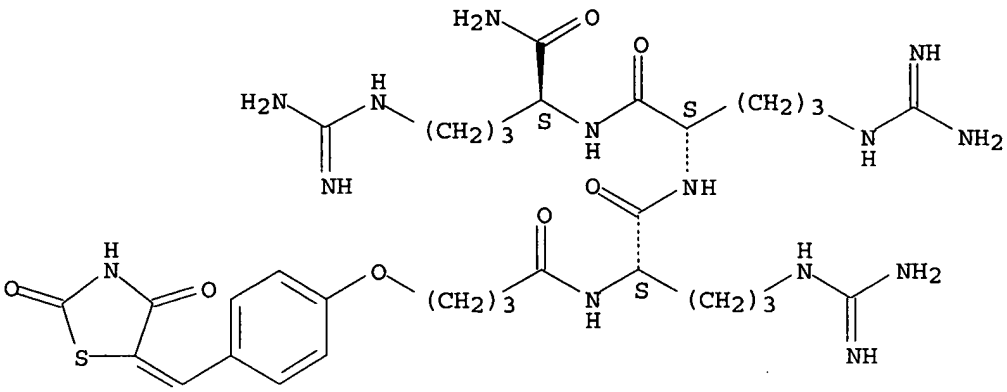
Absolute stereochemistry.
Double bond geometry unknown.



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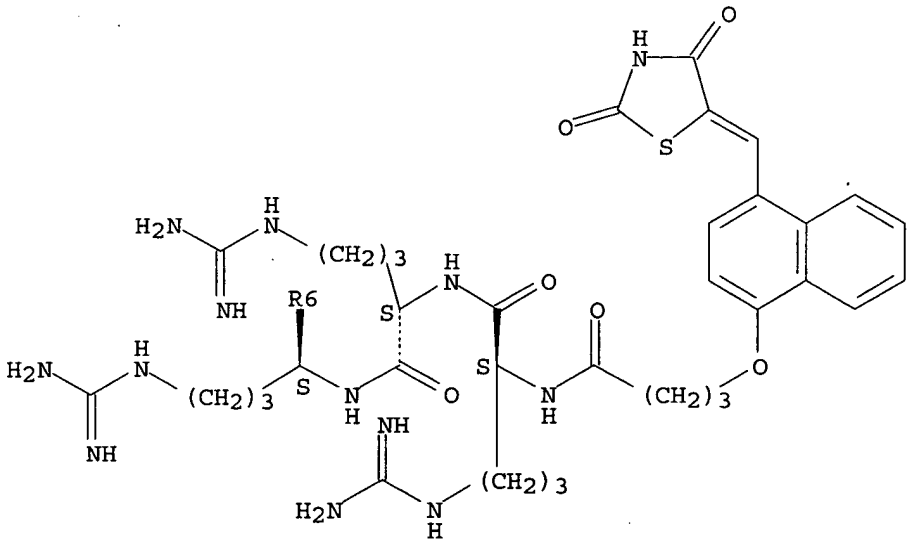
Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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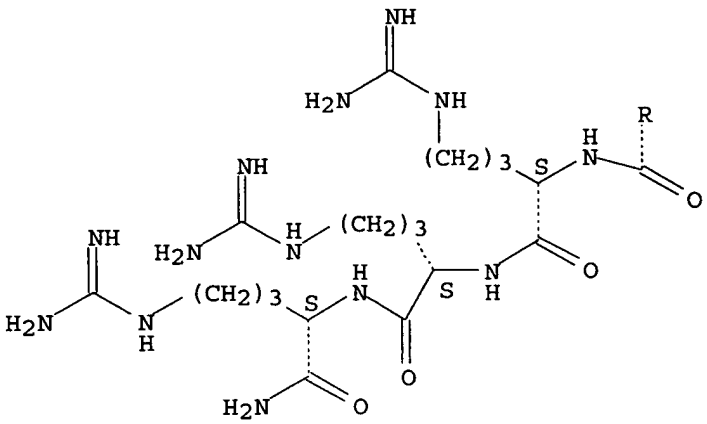

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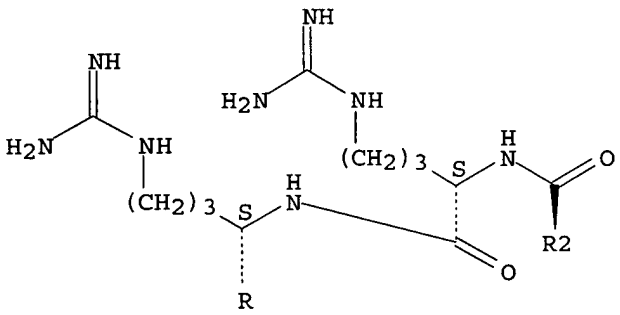

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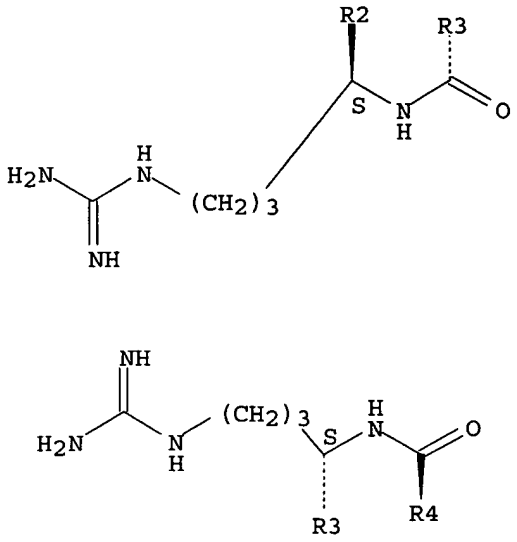

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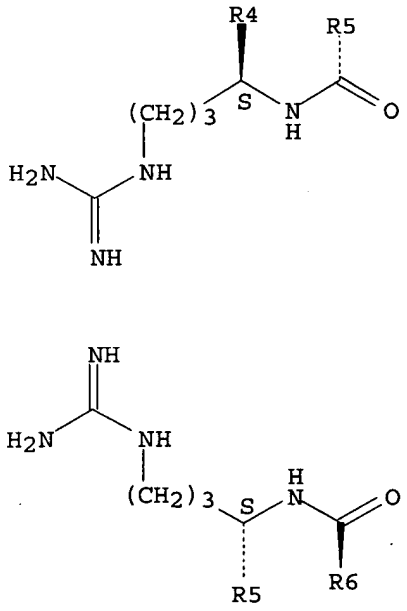

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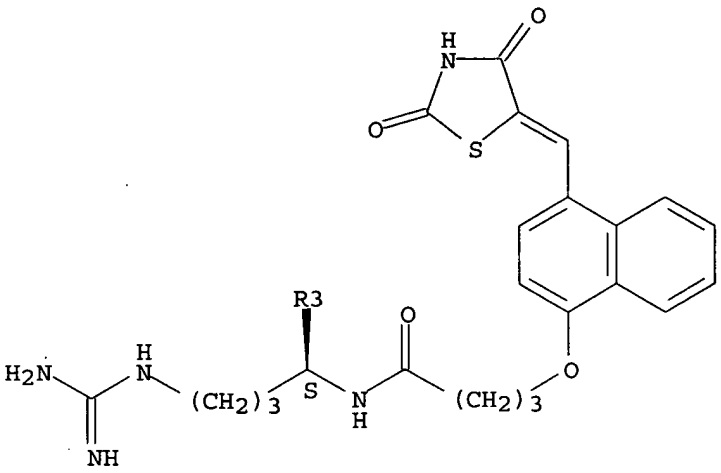
Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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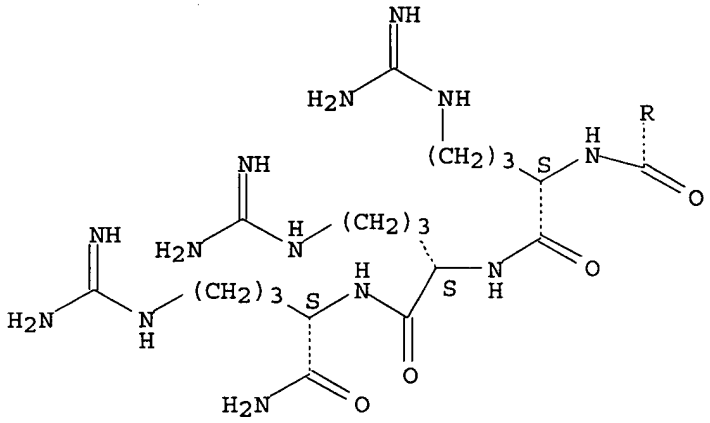

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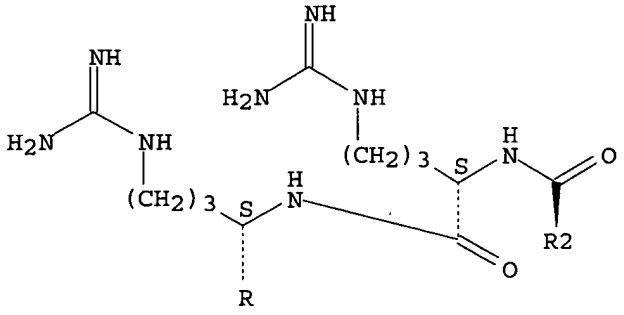

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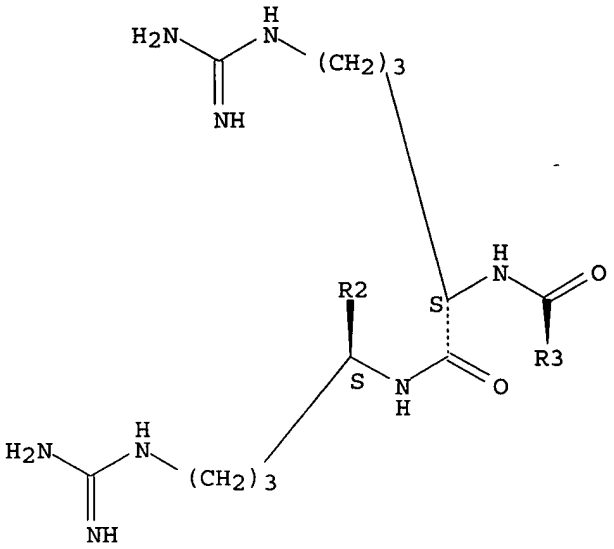

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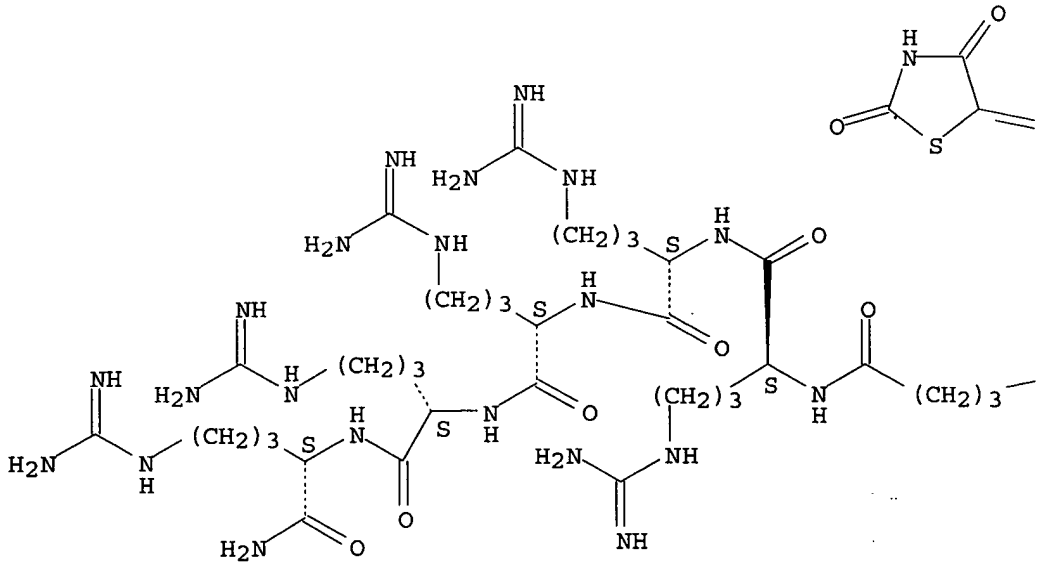
Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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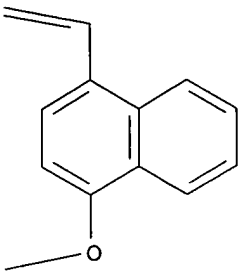

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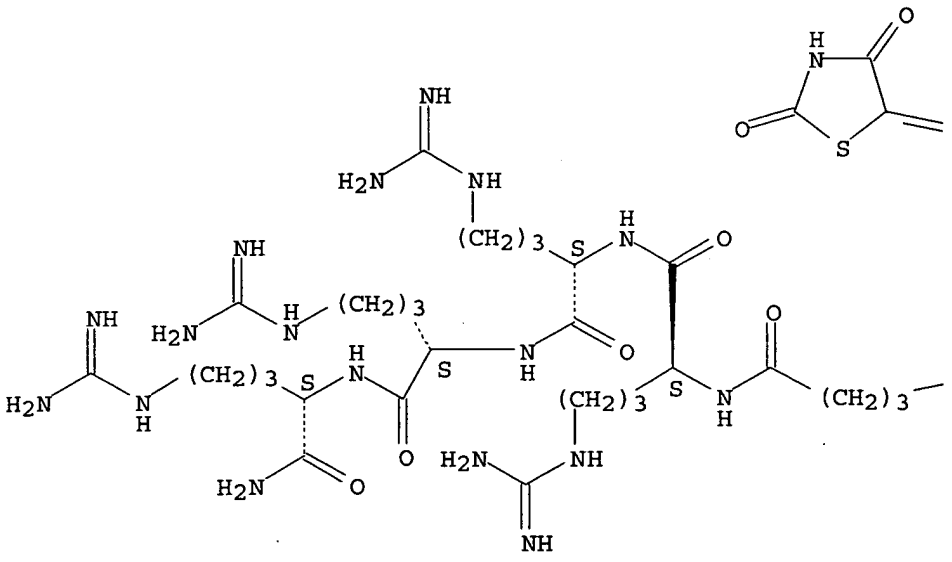
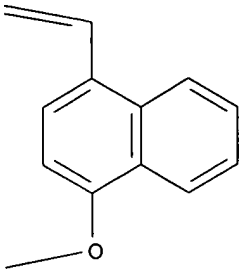
Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A





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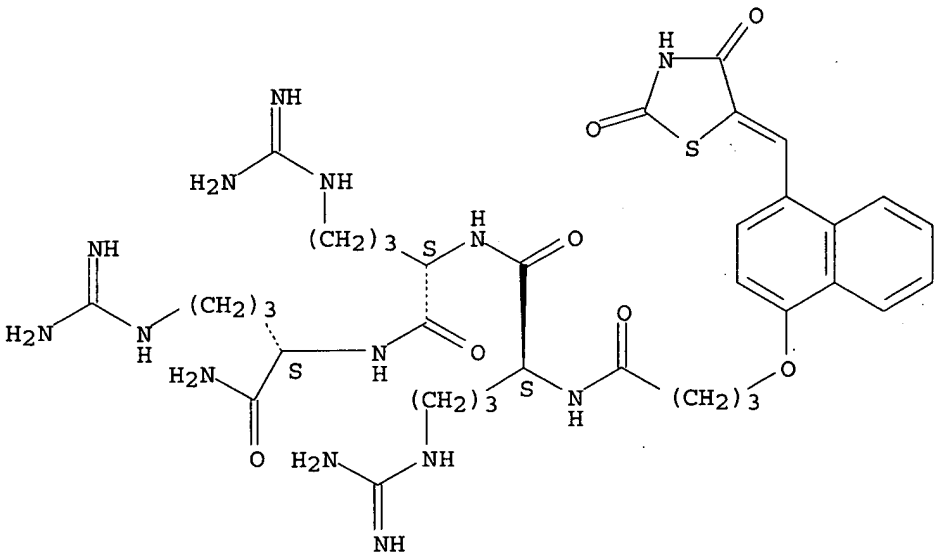
Absolute stereochemistry.
Double bond geometry unknown.



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Absolute stereochemistry.
Double bond geometry unknown.

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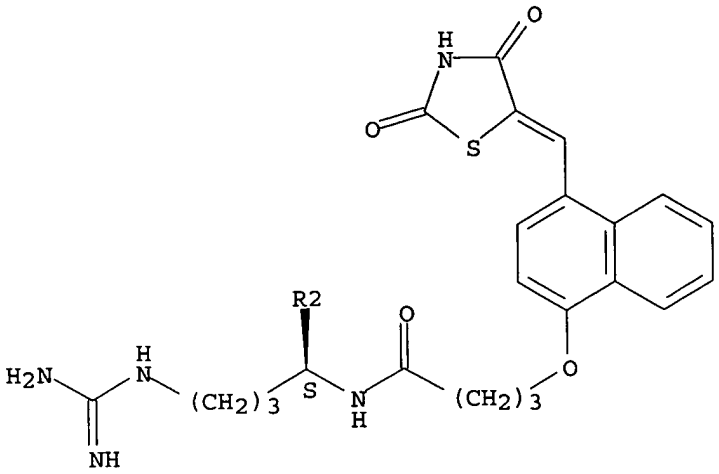

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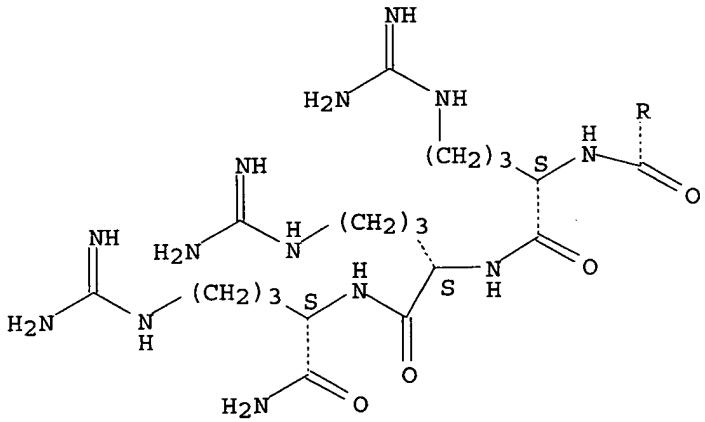

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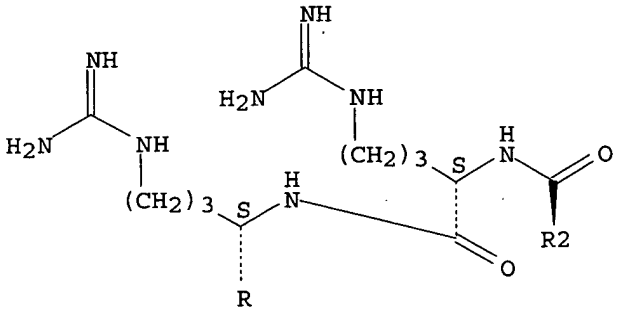
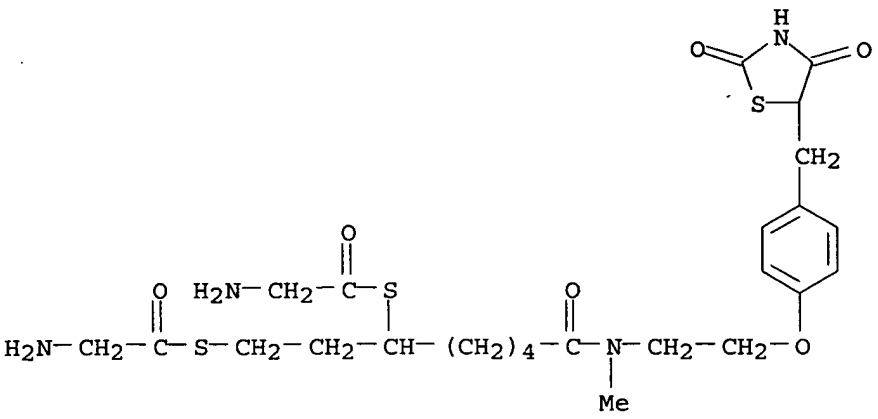


REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:674192 HCAPLUS
DOCUMENT NUMBER: 142:169368
TITLE: α-Lipoic acid-based PPARγ agonists for treating inflammatory skin diseases
AUTHOR(S): Venkatraman, Meenakshi S.; Chittiboyina, Amar; Meingassner, Josef; Ho, Christopher I.; Varani, James; Ellis, Charles N.; Avery, Mitchell A.; Pershadsingh, Harrihar A.; Kurtz, Theodore W.; Benson, Stephen C.
CORPORATE SOURCE: Department Medicinal Chemistry, University of Mississippi, University, MS, USA
SOURCE: Archives of Dermatological Research (2004), 296(3), 97-104
CODEN: ADREDL; ISSN: 0340-3696
PUBLISHER: Springer GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Novel thiazolidinedione derivs. of the potent antioxidant, α-lipoic (thioctic, 1,2-dithiolane) acid, were prepared The prototype N-(2-{4-[2,4-dioxo(1,3-thiazolidin-5-yl)methyl]phenoxy}ethyl)-5-(1,2-dithiolan-3-yl)-N-methylpentanamide (designated BP-1003), and dithioester derivs. thereof were shown to be potent activators of peroxisome proliferator-activated receptor gamma (PPARγ) (EC50 range 15-101 nM) and modest activators of PPARα (EC50 5 μM). Both the relatively hydrophobic dithiolane prototype, BP-1003, and its water-soluble dithioglycinate derivative, BP-1017, were shown to inhibit the proliferation of human keratinocytes and suppress the production of interleukin-2 by human peripheral lymphocytes to a greater extent than the antidiabetic thiazolidinedione, rosiglitazone. Both oral and topical administration of BP-1017 showed significant antiinflammatory effects in the oxazolone-sensitized mouse model of allergic contact dermatitis (ACD). These findings suggest that water-soluble lipoic acid-based thiazolidinediones may be efficacious as oral and topical agents for treating inflammatory skin conditions such as contact dermatitis, atopic dermatitis, and psoriasis.
IT **835650-57-2**, BP 1017
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(BP-1017 strongly activated PPARγ, modestly activated PPARα in CCL-70 cells and activated PPARγ in CCL-173 cells, inhibited proliferation of human keratinocytes and IL-2 production by activated PBMC than rosiglitazone)
RN 835650-57-2 HCAPLUS
CN Ethanethioic acid, amino-, S,S'-[1-[5-[[2-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]ethyl]methylamino]-5-oxopentyl]-1,3-propanediyl] ester, dihydrochloride (9CI) (CA INDEX NAME)



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REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:566933 HCAPLUS
DOCUMENT NUMBER: 141:270985
TITLE: Three-Dimensional Quantitative Structure-Activity Relationship Analysis of a Set of Plasmodium falciparum Dihydrofolate Reductase Inhibitors Using a Pharmacophore Generation Approach
AUTHOR(S): Parenti, Marco Daniele; Pacchioni, Sara; Ferrari, Anna Maria; Rastelli, Giulio
CORPORATE SOURCE: Dipartimento di Scienze Farmaceutiche, Universita di Modena e Reggio Emilia, Modena, 41100, Italy
SOURCE: Journal of Medicinal Chemistry (2004), 47(17), 4258-4267
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A 3D pharmacophore model able to quant. predict inhibition consts. was derived for a series of inhibitors of Plasmodium falciparum dihydrofolate reductase (PfDHFR), a validated target for antimalarial therapy. The data set included 52 inhibitors, with 23 of these comprising the training set and 29 an external test set. The activity range, expressed as Ki, of the training set mols. was from 0.3 to 11 300 nM. The 3D pharmacophore, generated with the HypoGen module of Catalyst 4.7, consisted of two hydrogen bond donors, one pos. ionizable feature, one hydrophobic aliphatic feature, and one hydrophobic aromatic feature and provided a 3D-QSAR model with a correlation coefficient of 0.954. Importantly, the type and spatial location of the chemical features encoded in the pharmacophore were in full agreement with the key binding interactions of PfDHFR inhibitors as previously established by mol. modeling and crystallog. of enzyme-inhibitor complexes. The model was validated using several techniques, namely, Fisher's randomization test using CatScramble, leave-one-out test to ensure that the QSAR model is not strictly dependent on one particular compound of the training set, and activity prediction in an external test set of compds. In addition, the pharmacophore was able to

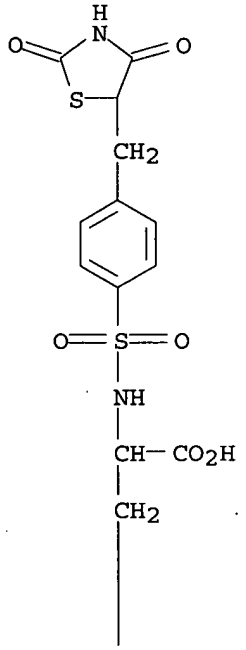
correctly classify as active and inactive the dihydrofolate reductase and aldose reductase inhibitors extracted from the MDDR database, resp. This test was performed to challenge the predictive ability of the pharmacophore with two classes of inhibitors that target very different binding sites. Mol. diversity of the data sets was finally estimated by the Tanimoto approach. The results obtained provide confidence for the utility of the pharmacophore in the virtual screening of libraries and databases of compds. to discover novel PfDHFR inhibitors.

IT **184095-78-1 184095-80-5 184095-82-7 184095-85-0 756890-15-0 756890-16-1 756890-17-2**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(QSAR of Plasmodium falciparum dihydrofolate reductase inhibitors using pharmacophore generation approach)

RN 184095-78-1 HCAPLUS

CN Phenylalanine, N-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]-4-fluoro- (9CI) (CA INDEX NAME)

PAGE 1-A



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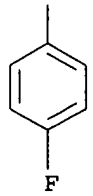

RN 184095-80-5 HCAPLUS
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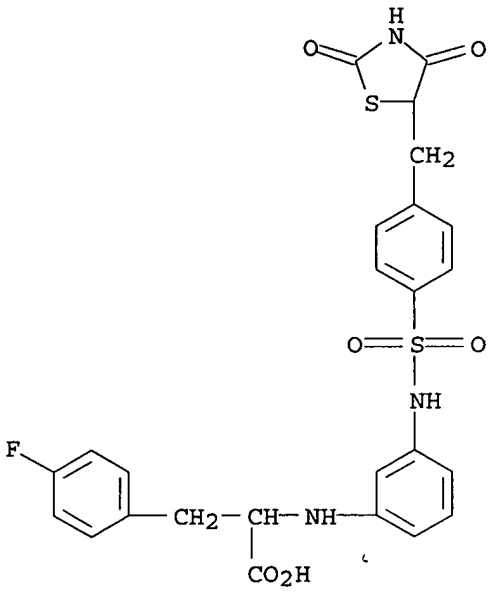

RN 184095-82-7 HCAPLUS
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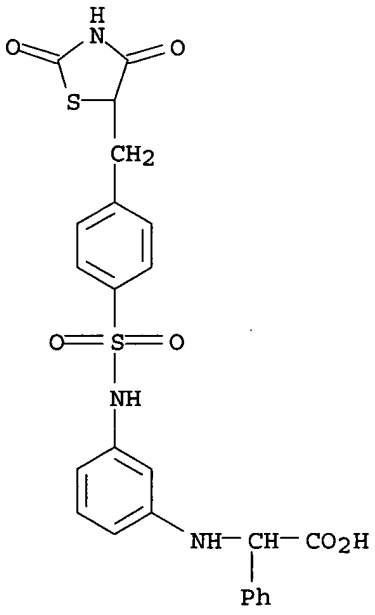
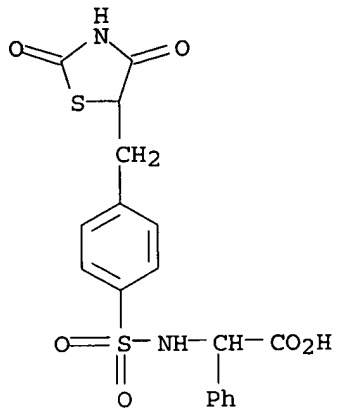


RN 184095-85-0 HCAPLUS

CN Benzeneacetic acid, α-[[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]amino]- (9CI) (CA INDEX NAME)



RN 756890-15-0 HCAPLUS
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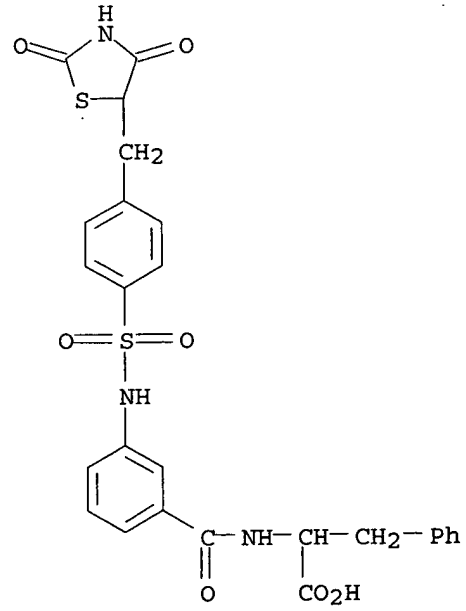
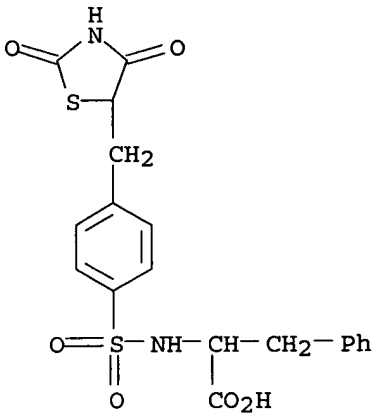
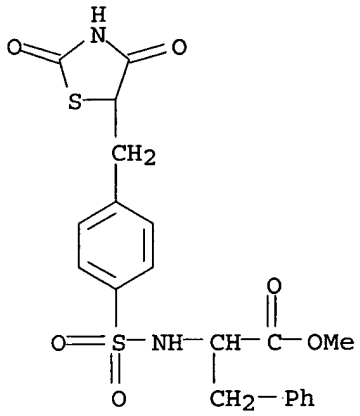


RN 756890-16-1 HCAPLUS
CN Phenylalanine, N-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)



RN 756890-17-2 HCAPLUS
CN Phenylalanine, N-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:261820 HCAPLUS
DOCUMENT NUMBER: 138:287978
TITLE: Novel ligands for the HisB10 Zn2+ sites of the R-state insulin hexamer
INVENTOR(S): Olsen, Helle Birk; Kaarsholm, Niels C.; Madsen, Peter; Ostergaard, Soren; Ludvigsen, Svend; Jakobsen, Palle; Petersen, Anders Klarskov; Steensgaard, Dorte Bjerre
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.; Novo Nordisk Health Care AG
SOURCE: PCT Int. Appl., 342 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2003027081	A2	20030403	WO 2002-DK595	20020913
WO 2003027081	A3	20040325		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1429763	A2	20040623	EP 2002-774468	20020913

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

BR 2002012522	A	20040810	BR 2002-12522	20020913
US 2003229120	A1	20031211	US 2003-332541	20030514

PRIORITY APPLN. INFO.:	DK 2001-1337	A	20010914
	US 2001-323925P	P	20010921
	DK 2002-1066	A	20020705
	US 2002-396051P	P	20020710
	WO 2002-DK595	W	20020913

OTHER SOURCE(S): MARPAT 138:287978

AB Novel ligands for the HisB10 Zn2+ sites of the R-state insulin hexamer that are capable of prolonging the action of insulin prepns. are disclosed. The ligands stabilize the hexamers and modify solubility in the neutral range, thus releasing insulin slowly following s.c. injection. Zinc-binding ligands A-B-C-D-X [A is a group which reversibly binds to a HisB10 Zn2+ site of an insulin hexamer; B is a linker selected from a valence bond or a chemical group GB of formula -B1-B2-CO-, -B1-B2-SO2-, -B1-B2-CH2-, or -B1-B2-NH-, where B1 is a valence bond, O, S, NH, or alkylimino and B2 is a valence bond, alk(en)(yn)ylene, (hetero)arylene, alkanedioyl, etc.; C is a fragment consisting of 0-5 neutral amino acids; D is a fragment comprising 1 to 20 pos. charged groups selected from amino or guanidino groups; X is OH, NH2 or a diamino group], including pharmaceutically-acceptable salts, isomers or racemates, are claimed. Thus, benzotriazol-5-ylcarbonyl-Gly2-Arg5-NH2 (BT-G2R5) was prepared and its effect on the pH-solubility profile of an insulin preparation is shown graphically.

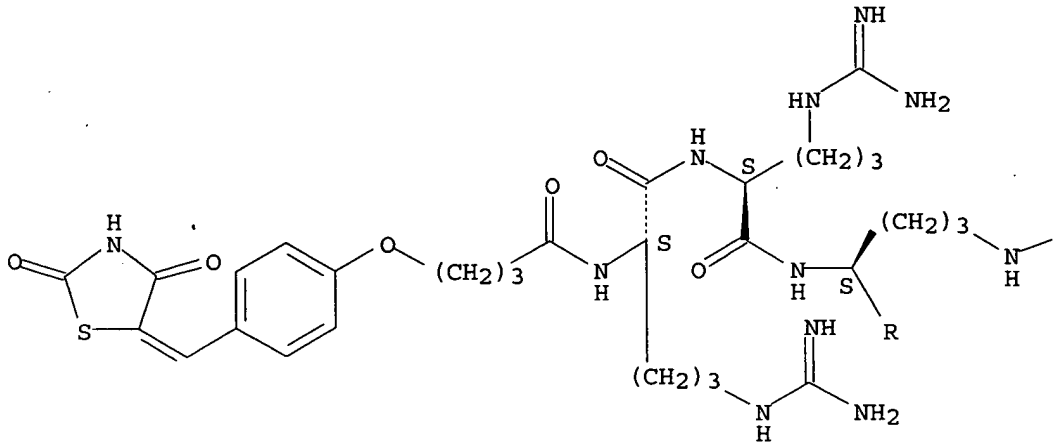
IT **503829-76-3P 503829-77-4P 503829-78-5P**
503829-79-6P 503829-80-9P 503829-81-0P
503829-82-1P 503829-83-2P
RL: BCP (Biochemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(novel ligands for histidine-B10 zinc(II) sites of R-state insulin hexamer)

RN 503829-76-3 HCAPLUS

CN L-Argininamide, N2-[4-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenoxy]-1-oxobutyl]-L-arginyl-L-arginyl-L-arginyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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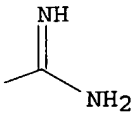

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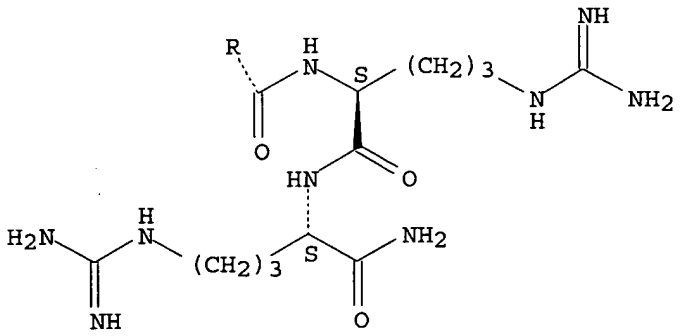
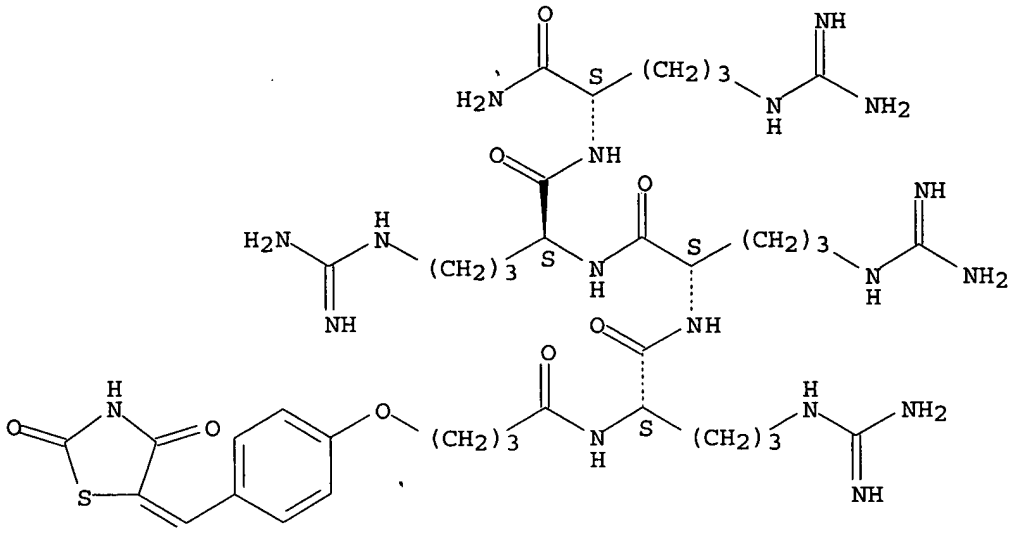


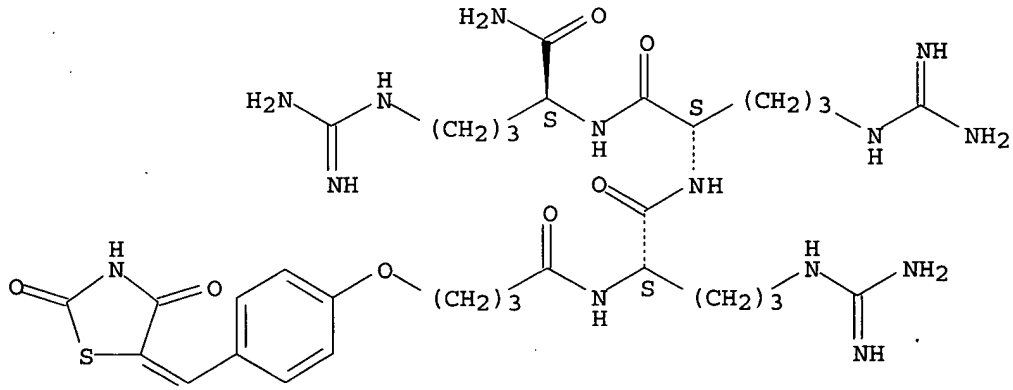
RN 503829-77-4 HCAPLUS
CN L-Argininamide, N2-[4-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenoxy]-1-oxobutyl]-L-arginyl-L-arginyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



RN 503829-78-5 HCAPLUS
CN L-Argininamide, N2-[4-[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenoxy]-1-oxobutyl]-L-arginyl-L-arginyl- (9CI) (CA INDEX NAME)

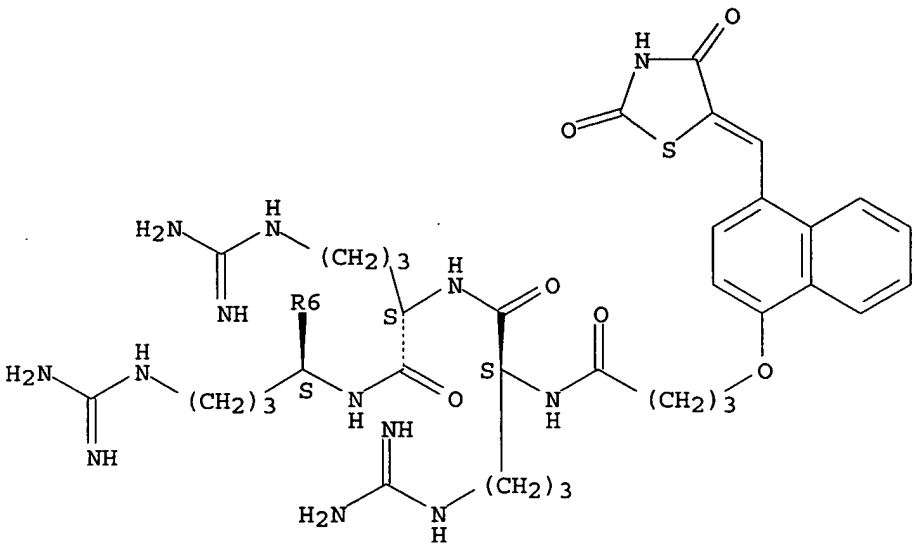
Absolute stereochemistry.
Double bond geometry unknown.



RN 503829-79-6 HCAPLUS
CN L-Argininamide, N2-[4-[[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-1-naphthalenyl]oxy]-1-oxobutyl]-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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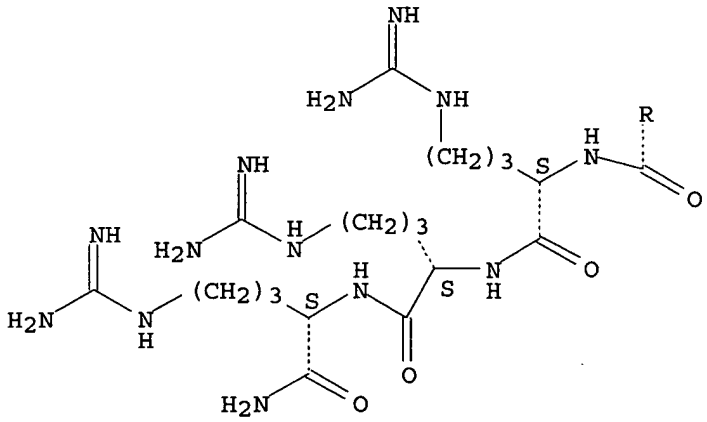
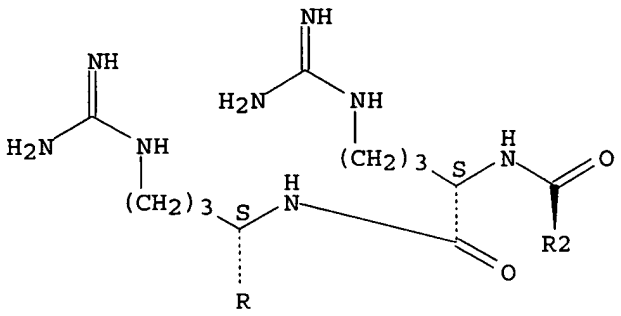


PAGE 3-A



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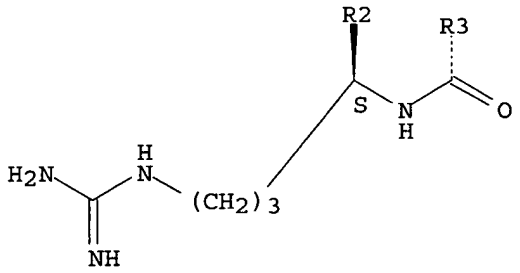

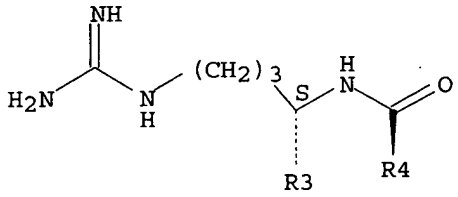

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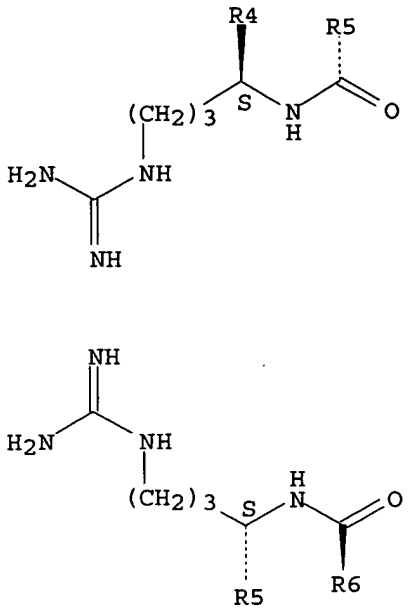
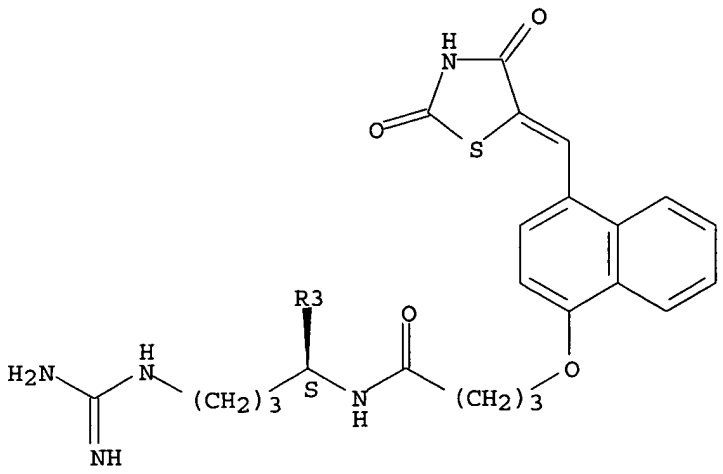


RN 503829-80-9 HCAPLUS
CN L-Argininamide, N2-[4-[[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-1-naphthalenyl]oxy]-1-oxobutyl]-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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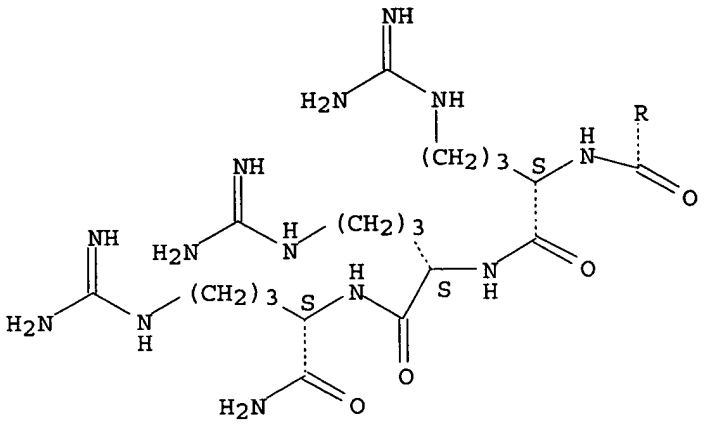

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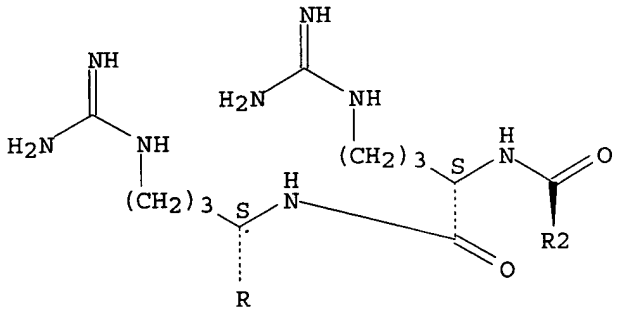

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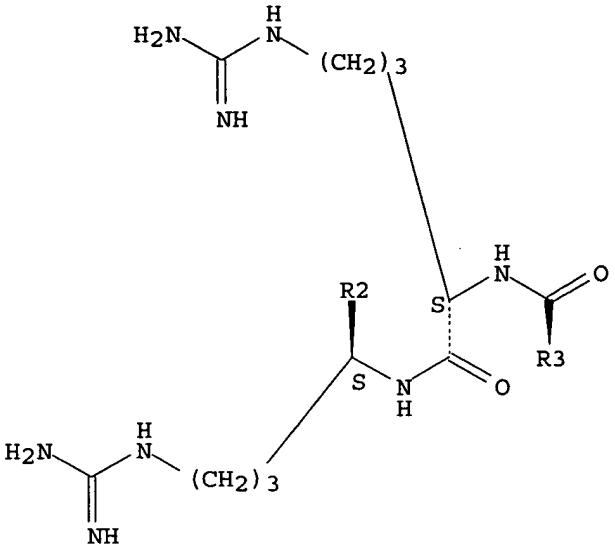

RN 503829-81-0 HCAPLUS
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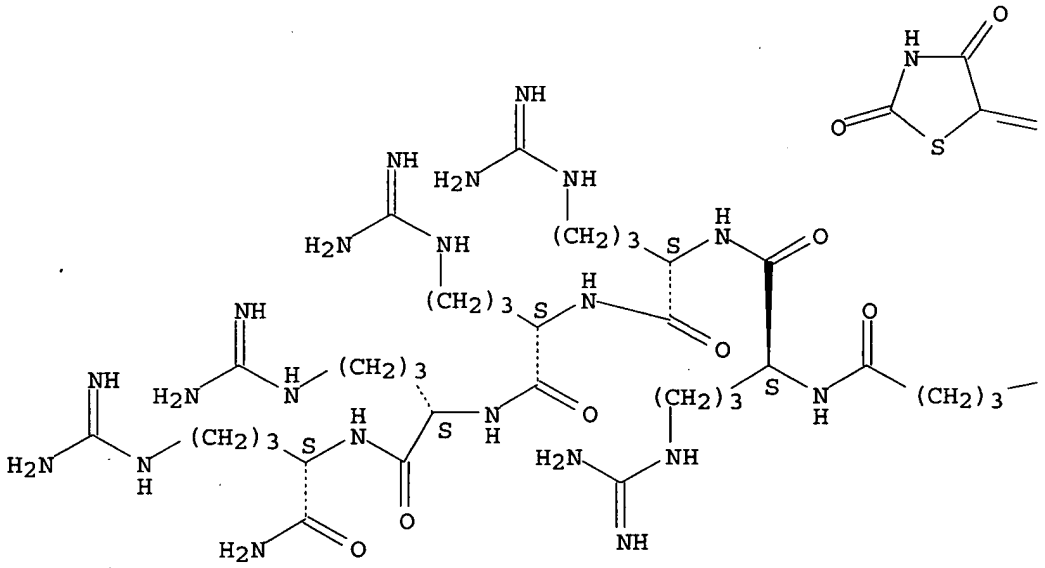
Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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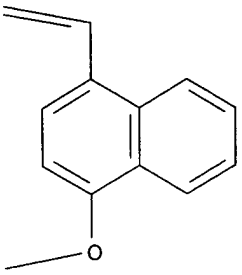
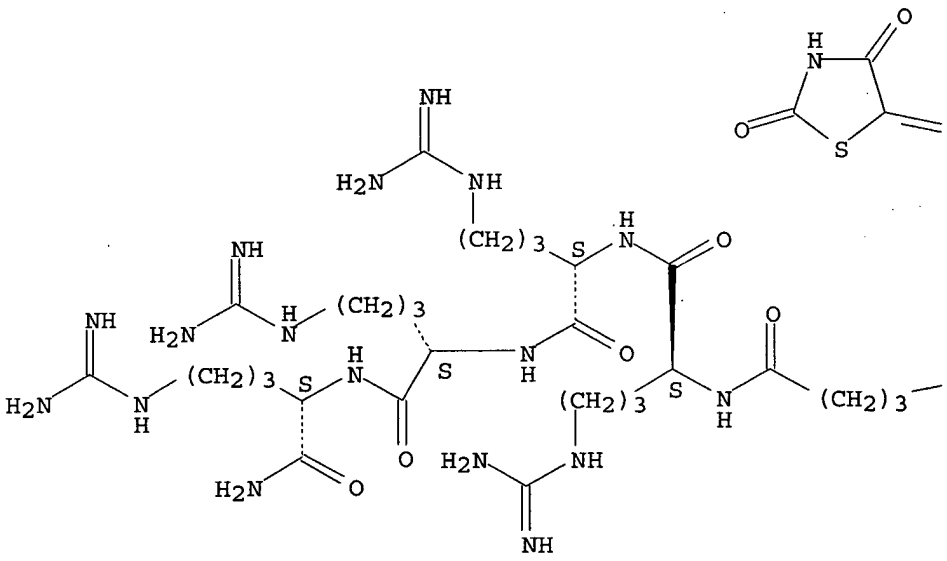
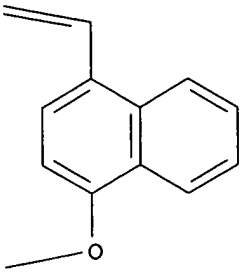


RN 503829-82-1 HCAPLUS
CN L-Argininamide, N2-[4-[[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-1-naphthalenyl]oxy]-1-oxobutyl]-L-arginyl-L-arginyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

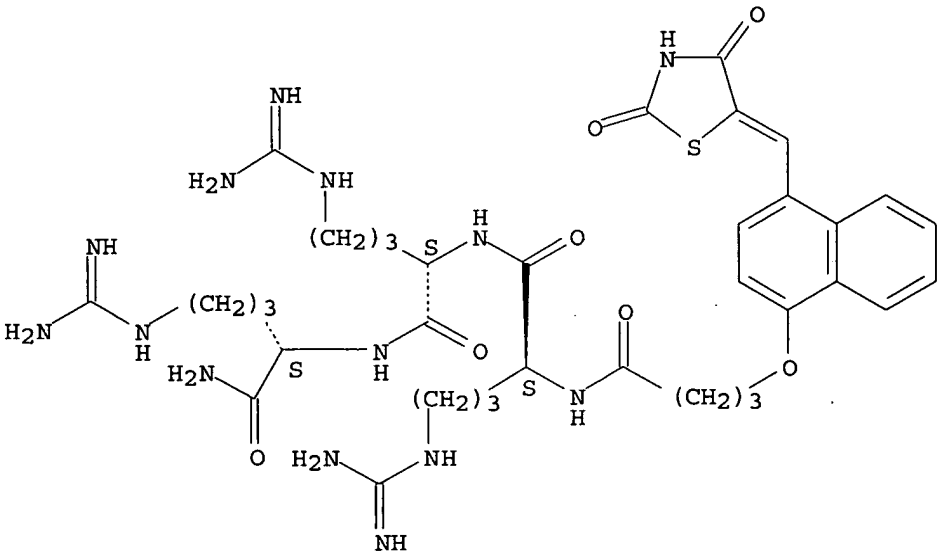
PAGE 1-A





RN 503829-83-2 HCAPLUS
CN L-Argininamide, N2-[4-[[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]-1-naphthalenyl]oxy]-1-oxobutyl]-L-arginyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



L7 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:479961 HCAPLUS
DOCUMENT NUMBER: 137:41755
TITLE: Antidiabetic agents containing amine derivatives having benzimidazole or imidazopyridine ring and their other uses
INVENTOR(S): Fujita, Takashi; Wada, Kunio; Oguchi, Minoru; Honma, Eiji; Fujiwara, Toshihiko
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 109 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002179568	A2	20020626	JP 2001-308814	20011004
PRIORITY APPLN. INFO.:			JP 2000-307159 A	20001006
OTHER SOURCE(S):	MARPAT 137:41755			

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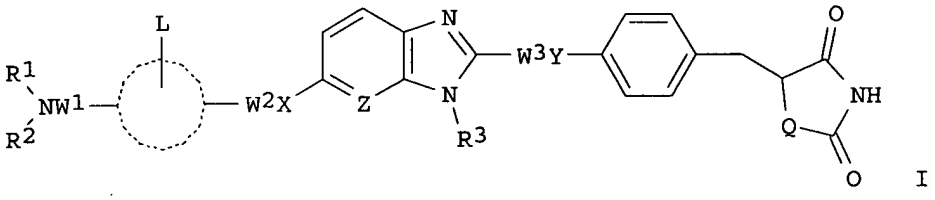


I

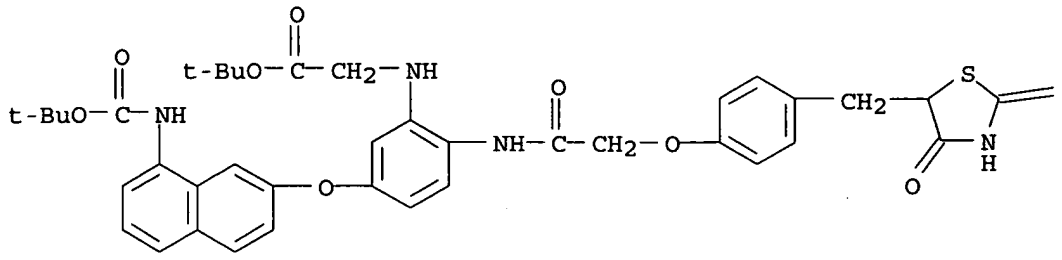
AB Prophylactic and/or therapeutic agents for diabetes, glucose intolerance, diabetic complications, or gestational diabetes contain the derivs. I (R1 = carbamoyl which may have 1-2 α, thiocarbamoyl which may have 1-2 α, sulfonyl having 1 α, carbonyl having 1 α; R2, R3 = H, C1-10 alkyl, C6-10 aryl, which may have 1-3 β, C7-16 aralkyl which may have 1-3 β on the aryl moiety; W1-W3 = direct bond, C1-8 alkylene; X, Y, Q = O, S; Z = :CH, N' Ar = benzene or naphthalene ring substituted with 1-4 L; L = H, C1-6 alkyl, C6-10 aryl which may have 1-3 β, C7-16 aralkyl which may have 1-3 β on the aryl moiety; definitions of α and β are given) or their pharmacol. acceptable salts. I and their salts are also useful as insulin resistance improving agents, hypoglycemics, inflammation inhibitors, immunomodulators, aldose reductase inhibitors, 5-lipoxygenase inhibitors, lipid peroxide formation inhibitors, PPAR activators, antiosteoporotic agents, leukotriene antagonists, adipocyte conversion promoters, cancer cell growth inhibitors, and Ca blockers. Feeding diabetic KK mice with feed containing 0.01% 1-(4-chlorophenyl)-3-[4-[2-[4-(2,4-dioxothiazolidin-5-ylmethyl)phenoxymethyl]-1-methyl-1H-benzimidazol-6-yloxy]-2,6-dimethylphenyl]thiourea (II) for 3 days showed 48.9% hypoglycemic effect. Capsules, tablets, and granules containing II were also formulated.

IT **438577-87-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzimidazole or imidazopyridine compds. as antidiabetic agents)

RN 438577-87-8 HCAPLUS

CN Glycine, N-[5-[[8-[[(1,1-dimethylethoxy)carbonyl]amino]-2-naphthalenyl]oxy]-2-[[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]acetyl]amino]phenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

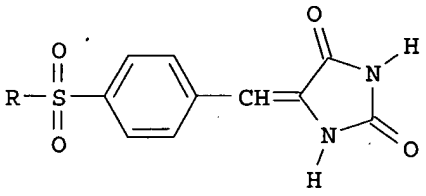
PAGE 1-A



PAGE 1-B

=O

L7 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:493888 HCAPLUS
DOCUMENT NUMBER: 135:242192
TITLE: Synthesis of some novel benzylidenehydantoins: amino acids derivatives
AUTHOR(S): El-Sayed, Ragab A.
CORPORATE SOURCE: Chemistry Department, Faculty of Science, Al-Azhar University, Nasr-City, Egypt
SOURCE: Chemistry of Heterocyclic Compounds (New York, NY, United States) (Translation of Khimiya Geterotsiklicheskikh Soedinenii) (2001), 37(1), 91-94
CODEN: CHCCAL; ISSN: 0009-3122
PUBLISHER: Kluwer Academic/Consultants Bureau
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:242192
GI

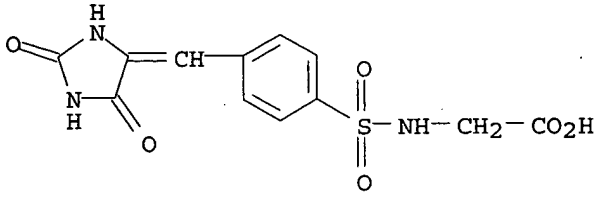


I

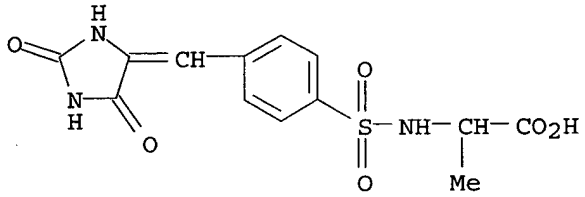
AB 5-Benzylidenehydantoin reacts with chlorosulfonic acid to give the corresponding p-sulfonyl chloride, I (R = Cl). Condensation of I (R = Cl) with amino acids leads to sulfonylamino acid derivs., which on coupling with glycine Me ester hydrochloride in THF-Et3N using the dicyclohexylcarbodiimide method furnish the desired dipeptide Me esters. The spectral data of the compds. are briefly discussed.

IT **331628-10-5P 331628-11-6P 331628-15-0P**
331628-17-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with glycine Me ester hydrochloride)

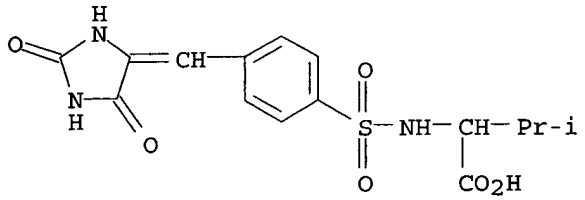
RN 331628-10-5 HCAPLUS
CN Glycine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)



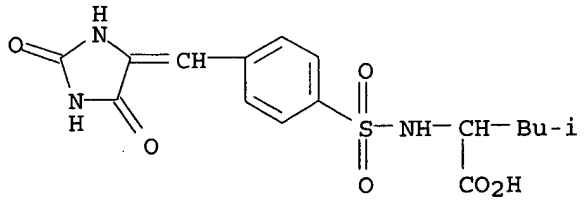
RN 331628-11-6 HCAPLUS
CN Alanine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)



RN 331628-15-0 HCAPLUS
CN Valine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)

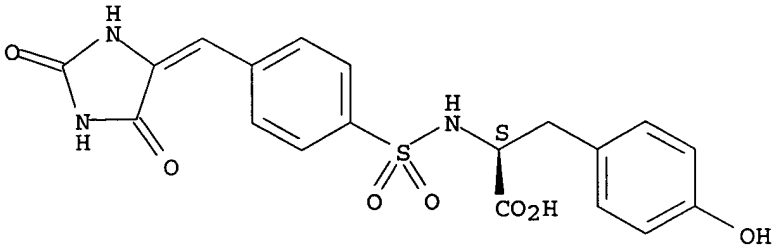


RN 331628-17-2 HCAPLUS
CN Leucine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)

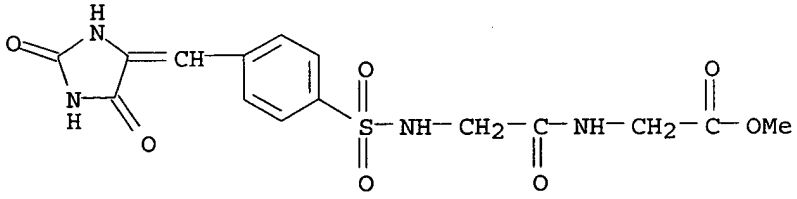


IT **331628-19-4P 331628-20-7P 331628-21-8P**
331628-22-9P 331628-24-1P 331628-26-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 331628-19-4 HCAPLUS
CN L-Tyrosine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl
]- (9CI) (CA INDEX NAME)

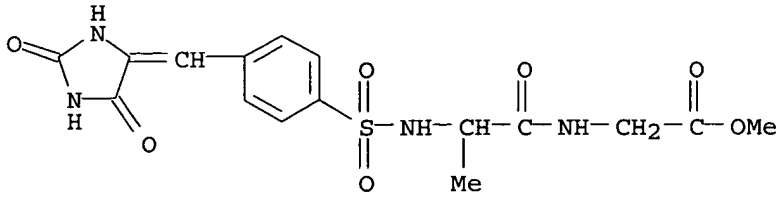
Absolute stereochemistry.
Double bond geometry unknown.



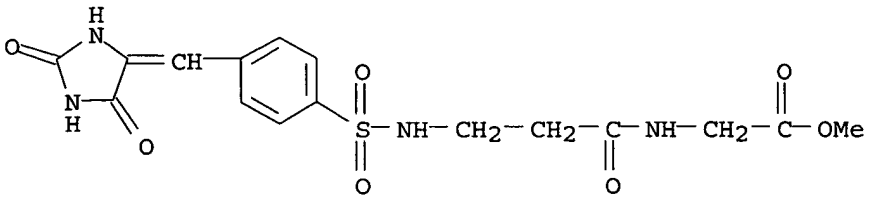
RN 331628-20-7 HCAPLUS
CN Glycine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]gl
ycyl-, methyl ester (9CI) (CA INDEX NAME)



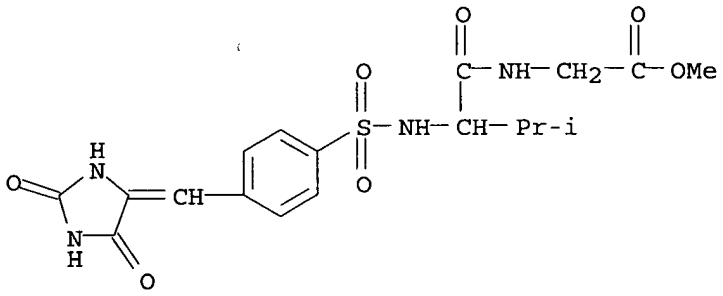
RN 331628-21-8 HCAPLUS
CN Glycine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]al
anyl-, methyl ester (9CI) (CA INDEX NAME)



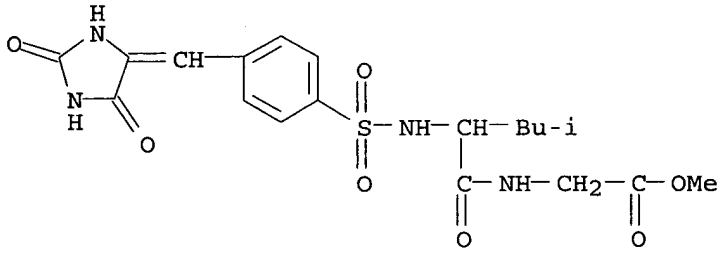
RN 331628-22-9 HCAPLUS
CN Glycine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]-
β-alanyl-, methyl ester (9CI) (CA INDEX NAME)



RN 331628-24-1 HCAPLUS
CN Glycine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]valyl-, methyl ester (9CI) (CA INDEX NAME)



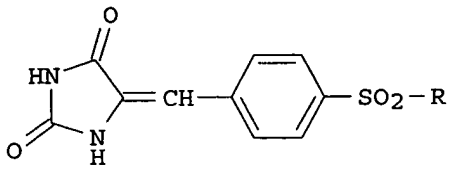
RN 331628-26-3 HCAPLUS
CN Glycine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]leucyl-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:94908 HCAPLUS
DOCUMENT NUMBER: 134:252647
TITLE: Sulfur containing activated hydantions. Synthesis and screening some novel benzylidenehydantoins amino acids derivatives
AUTHOR(S): El-Sayed, Ragab A.
CORPORATE SOURCE: Chemistry Department, Faculty of Science, Al-Azhar University, Nasr City, Egypt
SOURCE: Journal of the Serbian Chemical Society (2001), 66(1), 17-21
CODEN: JSCSEN; ISSN: 0352-5139
PUBLISHER: Serbian Chemical Society
DOCUMENT TYPE: Journal

LANGUAGE: English
OTHER SOURCE(S): CASREACT 134:252647
GI

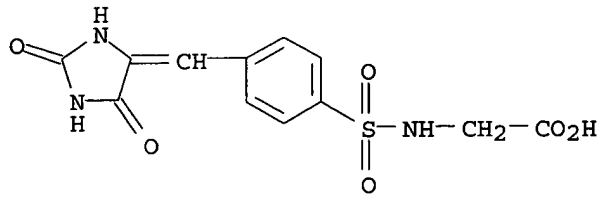


I

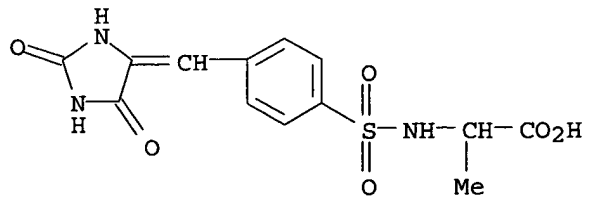
AB 5-Benzylidenehydantoin reacted with chlorosulfonic acid to give sulfonyl chloride I (R = Cl). Its condensation with amino acids gave N-(benzylidenehydantoinsulfonyl)amino acids I (R = Gly-OH, DL-Ala-OH, DL-Val-OH, DL-Leu-OH, β-Ala-OH, L-Tyr-OH). Coupling reactions of some of the above amino acid derivs. with H-Gly-OMe·HCl in a THF-Et3N medium using the dicyclohexylcarbodiimide (DCC) method provided dipeptide Me esters I (R = Gly-Gly-OMe, DL-Ala-Gly-OMe, β-Ala-Gly-OMe, DL-Val-Gly-OMe, DL-Leu-Gly-OMe). NMR and IR data of the synthesized compds. were briefly discussed.

IT **331628-10-5P 331628-11-6P 331628-15-0P 331628-17-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzylidenehydantoinsulfonyl derivs. of amino acids and dipeptides)

RN 331628-10-5 HCAPLUS
CN Glycine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)

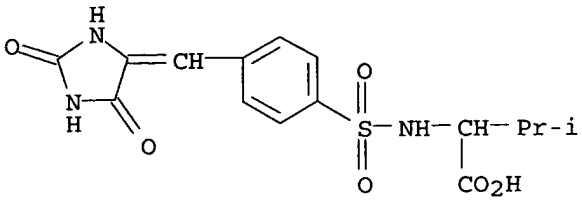


RN 331628-11-6 HCAPLUS
CN Alanine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)

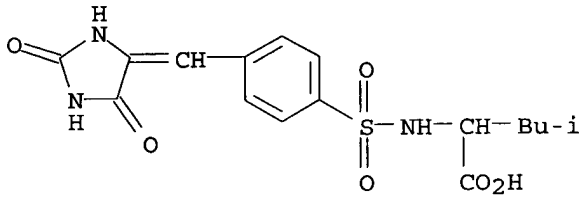


RN 331628-15-0 HCAPLUS
CN Valine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]-

(9CI) (CA INDEX NAME)

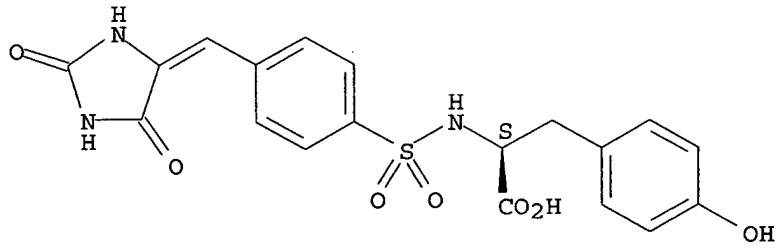


RN 331628-17-2 HCAPLUS
CN Leucine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]-
(9CI) (CA INDEX NAME)

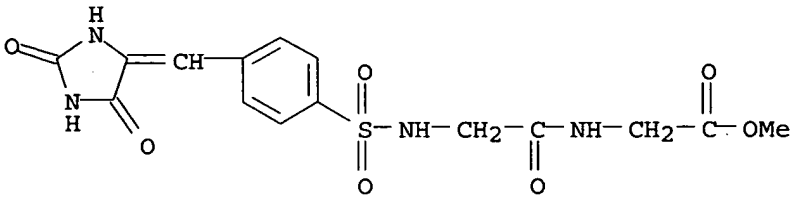


IT **331628-19-4P 331628-20-7P 331628-21-8P**
331628-22-9P 331628-24-1P 331628-26-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of benzylidenehydantoinsulfonyl derivs. of amino acids and dipeptides)
RN 331628-19-4 HCAPLUS
CN L-Tyrosine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)

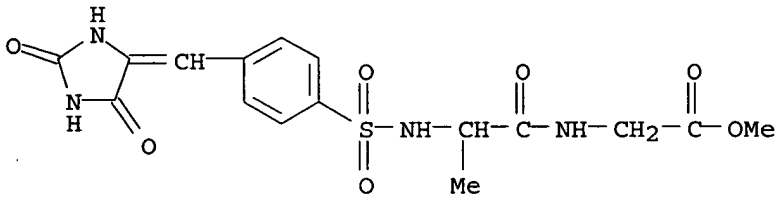
Absolute stereochemistry.
Double bond geometry unknown.



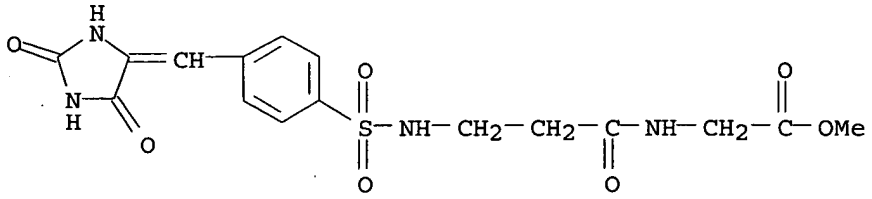
RN 331628-20-7 HCAPLUS
CN Glycine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]glycyl-, methyl ester (9CI) (CA INDEX NAME)



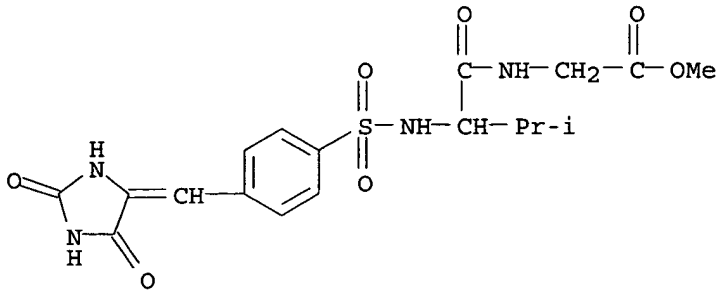
RN 331628-21-8 HCAPLUS
CN Glycine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]alanyl-, methyl ester (9CI) (CA INDEX NAME)



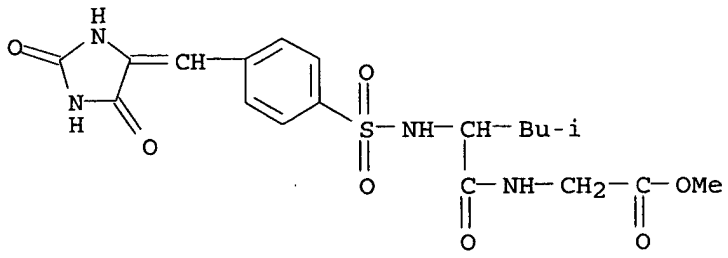
RN 331628-22-9 HCAPLUS
CN Glycine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]-β-alanyl-, methyl ester (9CI) (CA INDEX NAME)



RN 331628-24-1 HCAPLUS
CN Glycine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]valyl-, methyl ester (9CI) (CA INDEX NAME)



RN 331628-26-3 HCAPLUS
CN Glycine, N-[[4-[(2,5-dioxo-4-imidazolidinylidene)methyl]phenyl]sulfonyl]leucyl-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:15004 HCAPLUS
DOCUMENT NUMBER: 132:73666
TITLE: Ophthalmic uses of PPAR-γ agonists and antagonists
INVENTOR(S): Pershadsingh, Harrihar A.; Levy, Daniel E.
PATENT ASSIGNEE(S): Photogenesis, Inc., USA
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2000000194	A1	20000106	WO 1999-US14262		19990625
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
AU 9947134	A1	20000117	AU 1999-47134		19990625
US 6316465	B1	20011113	US 1999-342381		19990628
PRIORITY APPLN. INFO.:			US 1998-90937P	P	19980627
			US 1998-90937	P	19980627
			WO 1999-US14262	W	19990625

OTHER SOURCE(S): MARPAT 132:73666

AB Methods are disclosed for treating diseases of ocular tissues expressing the nuclear receptor PPAR-γ, by inhibiting the inflammatory response, the neovascularization and angiogenesis, and programmed cell death (apoptosis) in these target tissues, comprising administering to a human or animal in need of treatment an effective amount of a compound that modifies the activity of PPAR-γ, or a pharmaceutically acceptable salt or solvate thereof. Novel compds. and methods for their synthesis are provided.

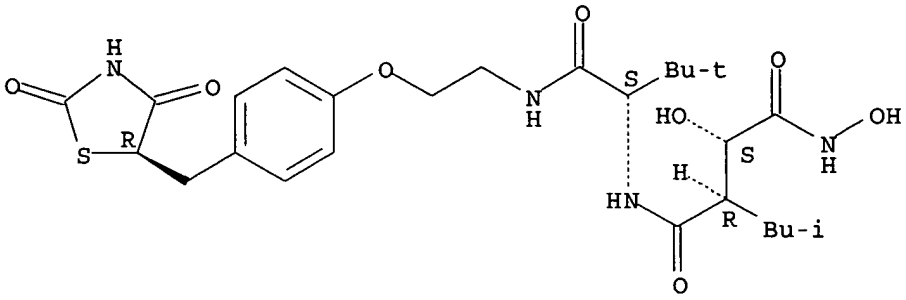
IT **253587-89-2 253587-91-6 253587-93-8 253587-96-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(ophthalmic uses of PPAR-γ agonists and antagonists)

RN 253587-89-2 HCAPLUS

CN Butanediamide, N4-[(1S)-1-[[[2-[4-[[(5R)-2,4-dioxo-5-thiazolidinyl]methyl]phenoxy]ethyl]amino]carbonyl]-2,2-dimethylpropyl]-N1,2-dihydroxy-3-(2-methylpropyl)-, (2S,3R)- (9CI) (CA INDEX NAME)

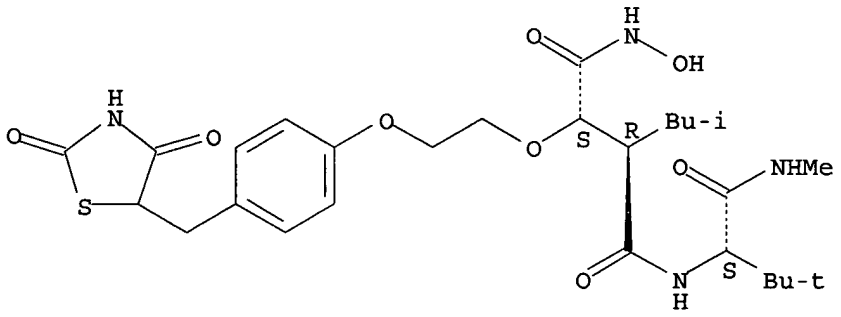
Absolute stereochemistry.



RN 253587-91-6 HCAPLUS

CN Butanediamide, N4-[(1S)-2,2-dimethyl-1-[(methylamino)carbonyl]propyl]-2-[2-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]ethoxy]-N1-hydroxy-3-(2-methylpropyl)-, (2S,3R)- (9CI) (CA INDEX NAME)

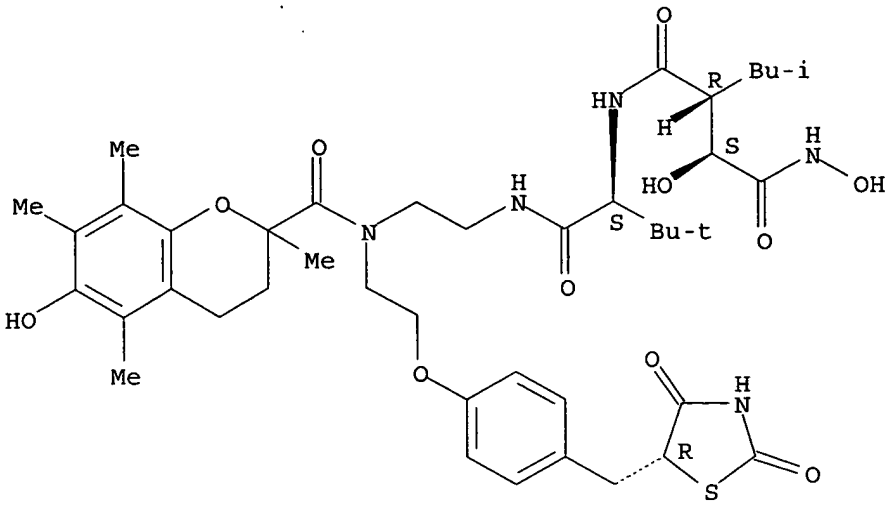
Absolute stereochemistry.



RN 253587-93-8 HCAPLUS

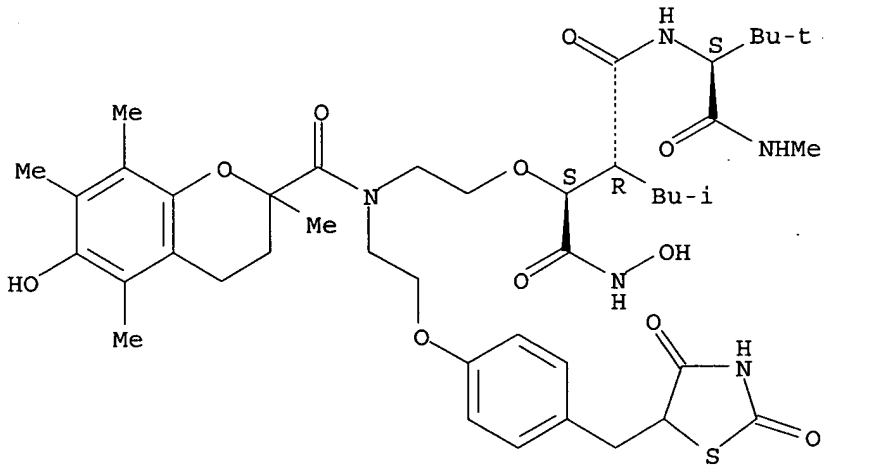
CN Butanediamide, N4-[(1S)-1-[[[2-[[(3,4-dihydro-6-hydroxy-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl)carbonyl][2-[4-[[(5R)-2,4-dioxo-5-thiazolidinyl]methyl]phenoxy]ethyl]amino]ethyl]amino]carbonyl]-2,2-dimethylpropyl]-N1,2-dihydroxy-3-(2-methylpropyl)-, (2S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 253587-96-1 HCAPLUS
CN Butanediamide, 2-[2-[[(3,4-dihydro-6-hydroxy-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl)carbonyl][2-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]ethyl]amino]ethoxy]-N4-[(1S)-2,2-dimethyl-1-[(methylamino)carbonyl]propyl]-N1-hydroxy-3-(2-methylpropyl)-, (2S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



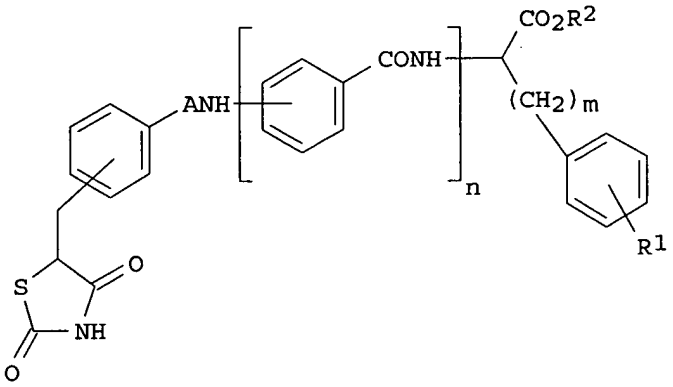
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:743595 HCAPLUS
DOCUMENT NUMBER: 126:19325
TITLE: Preparation of (dioxothiazolidinylalkylbenzoyl)phenylalanine derivatives and analogs as hypoglycemics and aldose reductase inhibitors
INVENTOR(S): Matsushima, Hiroaki; Myaoka, Shozo; Sugizaki, Myoshi
PATENT ASSIGNEE(S): Terumo Corp, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08245602	A2	19960924	JP 1995-48022	19950308

PRIORITY APPLN. INFO.: JP 1995-48022 19950308
OTHER SOURCE(S): MARPAT 126:19325
GI



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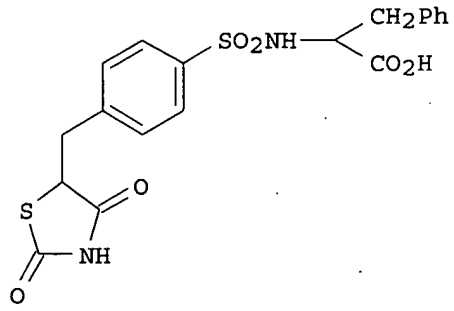


II

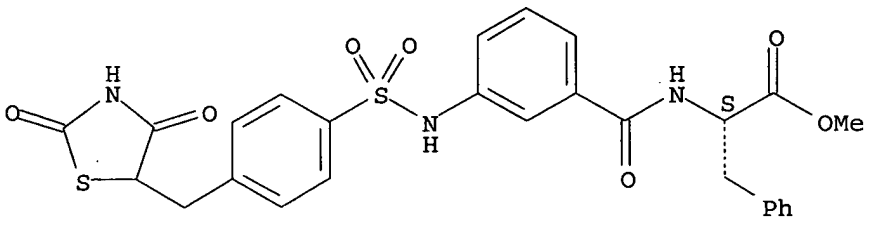
AB The title compds. I [A = carbonyl, etc.; R1 = H, halo; R2 = H, alkyl; m, n = 0 or 1] are prepared Dioxothiazolidine derivative II (preparation given) in vitro showed IC50 of 6.35 x 10-6 M against aldose reductase.

IT **184095-73-6P 184095-74-7P 184095-75-8P**
184095-76-9P 184095-77-0P 184095-78-1P
184095-79-2P 184095-80-5P 184095-81-6P
184095-82-7P 184095-84-9P 184095-85-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of (dioxothiazolidinylalkylbenzoyl)phenylalanine derivs. and analogs as hypoglycemics and aldose reductase inhibitors)

RN 184095-73-6 HCAPLUS

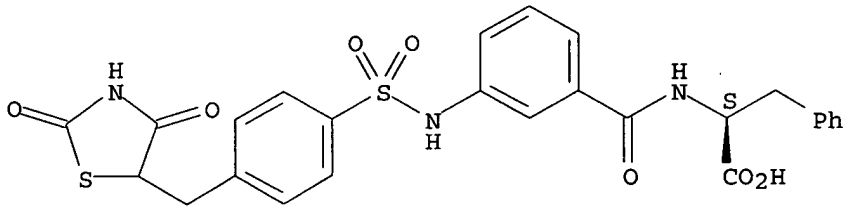
CN L-Phenylalanine, N-[3-[[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]amino]benzoyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



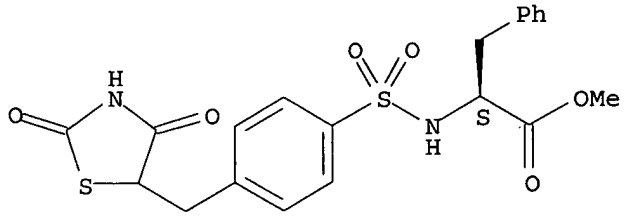
RN 184095-74-7 HCAPLUS
CN L-Phenylalanine, N-[3-[[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



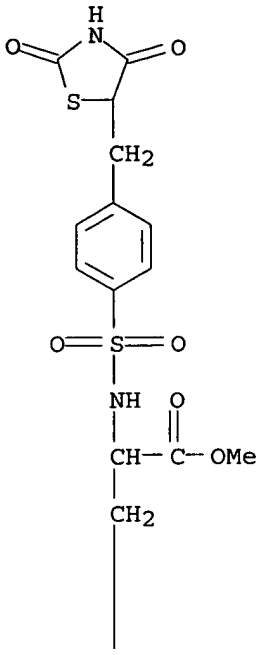
RN 184095-75-8 HCAPLUS
CN L-Phenylalanine, N-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 184095-76-9 HCAPLUS
CN Phenylalanine, N-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]-4-fluoro-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



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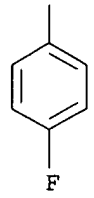
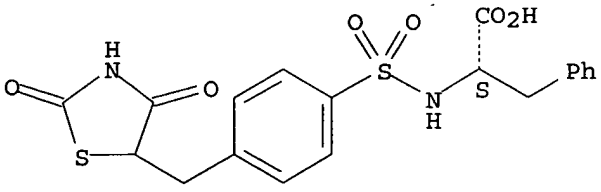


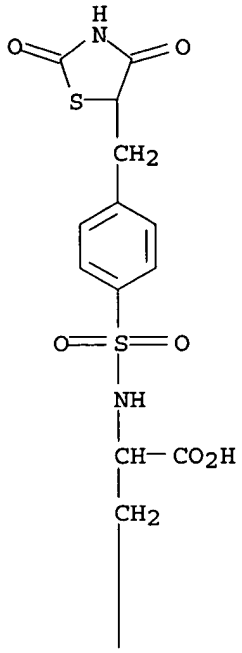
RN 184095-77-0 HCAPLUS
CN L-Phenylalanine, N-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 184095-78-1 HCAPLUS
CN Phenylalanine, N-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]-4-fluoro- (9CI) (CA INDEX NAME)

PAGE 1-A



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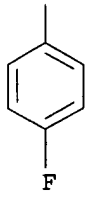
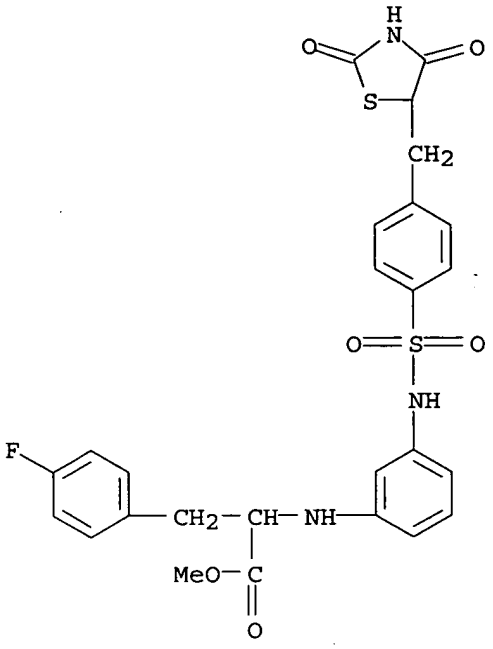
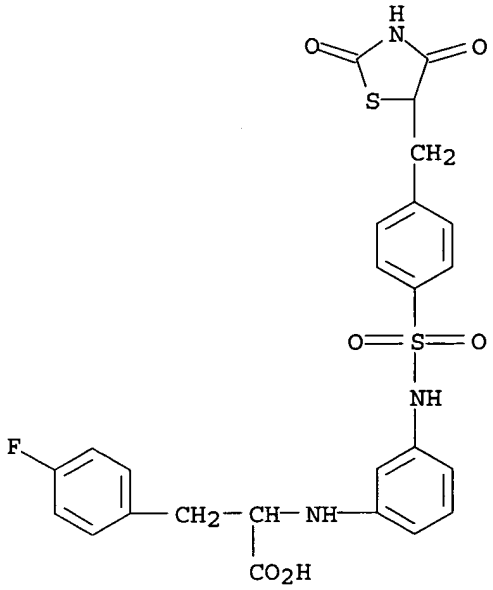


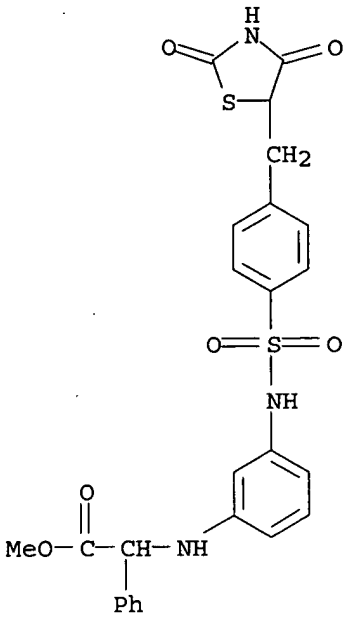
RN 184095-79-2 HCAPLUS
CN Phenylalanine, N-[3-[[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]amino]phenyl]-4-fluoro-, methyl ester (9CI) (CA INDEX NAME)



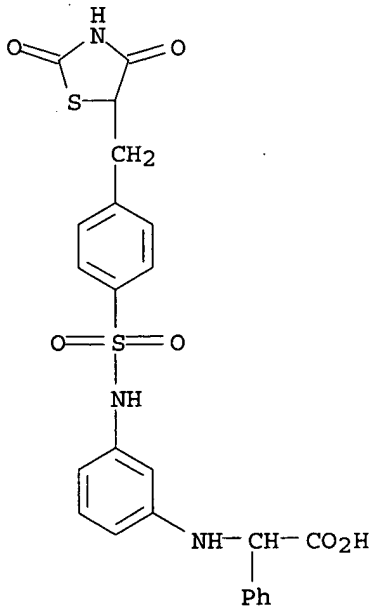
RN 184095-80-5 HCAPLUS
CN Phenylalanine, N-[3-[[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]amino]phenyl]-4-fluoro- (9CI) (CA INDEX NAME)



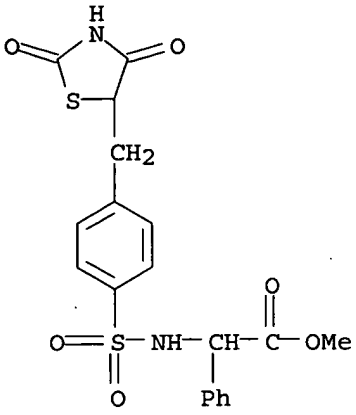
RN 184095-81-6 HCAPLUS
CN Benzeneacetic acid, α-[[3-[[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]amino]phenyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



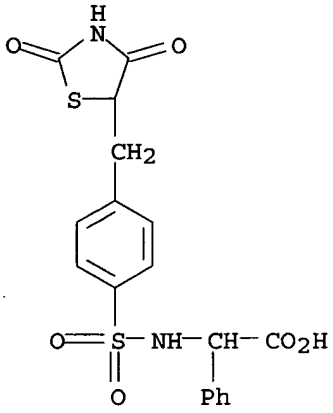
RN 184095-82-7 HCAPLUS
CN Benzeneacetic acid, α-[[3-[[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]amino]phenyl]amino]- (9CI) (CA INDEX NAME)



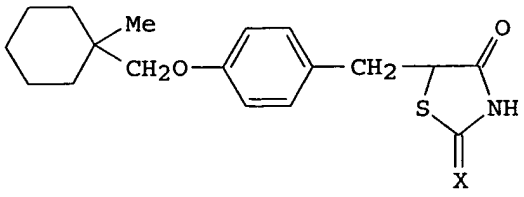
RN 184095-84-9 HCAPLUS
CN Benzeneacetic acid, α-[[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



RN 184095-85-0 HCAPLUS
CN Benzeneacetic acid, α-[[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]sulfonyl]amino]- (9CI) (CA INDEX NAME)



L7 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1983:125945 HCAPLUS
DOCUMENT NUMBER: 98:125945
TITLE: Studies on antidiabetic agents. II. Synthesis of 5-[4-(1-methylcyclohexylmethoxy)benzyl]thiazolidine-2,4-dione (ADD-3878) and its derivatives.
AUTHOR(S): Sohda, Takashi; Mizuno, Katsutoshi; Imamiya, Eiko; Sugiyama, Yasuo; Fujita, Takeshi; Kawamatsu, Yutaka
CORPORATE SOURCE: Cent. Res. Div., Takeda Chem. Ind., Ltd., Osaka, 532, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1982), 30(10), 3580-600
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



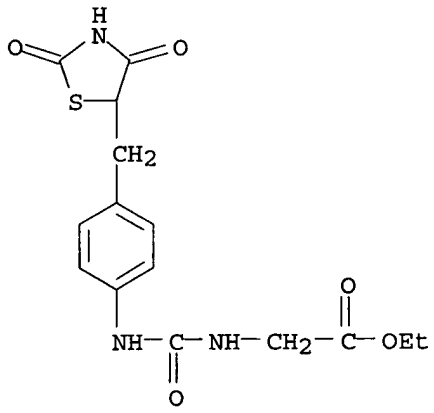
I

AB More than 100 5-substituted thiazolidine-2,4-diones were prepared and their hypoglycemic and hypolipidemic activities were evaluated with genetically obese and diabetic mice, yellow KK. Thus, 2-chloro-3-[4-(1-methylcyclohexylmethoxy)phenylpropionate was cyclized with H2NCSNH2 to give the thiazolidinone I (X = NH), which was hydrolyzed to give I (X = O). The structure-activity relationship study showed that the 5-(4-oxybenzyl) moiety is essential for substantial activity. Among these compds., 5-(4-cyclohexylmethoxy)benzylthiazolidine-2,4-dione I (X = O) and 5-[4-[2-(3-pyridyl)ethoxy]benzyl]thiazolidine exhibited the most favorable properties in terms of activity and toxicity.

IT **85002-42-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and hypoglycemic and hypolipidemic activity of)

RN 85002-42-2 HCAPLUS

CN Glycine, N-[[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]amino]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)



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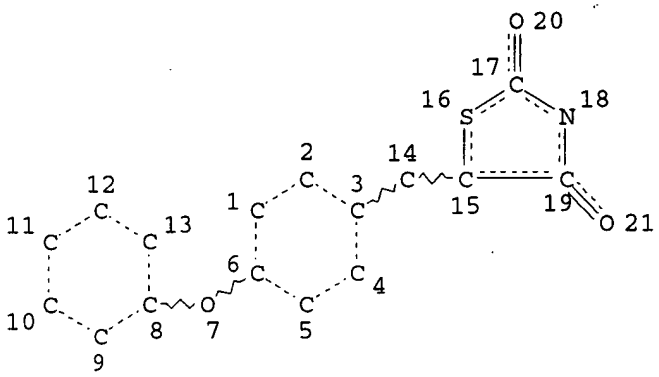
L17 STR



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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE
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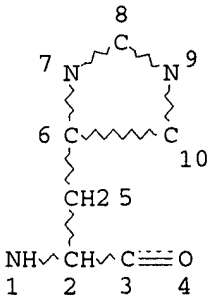
L20 STR



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DEFAULT ECLEVEL IS LIMITED

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NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
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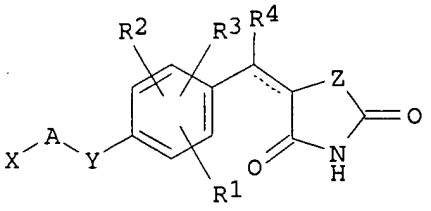
L21 ANSWER 1 OF 1 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 141:140764 MARPAT
TITLE: Preparation of amino acid phenoxy ethers as inhibitors of cytokines
INVENTOR(S): Nag, Bishwajit; Nag, Abhijeet; Dey, Debendranath; Agarwal, Shiv Kumar
PATENT ASSIGNEE(S): Bexel Pharmaceuticals, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 47 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004142991	A1	20040722	US 2003-356113	20030131
US 6794401	B2	20040921		
WO 2004066964	A2	20040812	WO 2004-US790	20040113
WO 2004066964	C2	20040902		
WO 2004066964	A3	20050224		

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI

PRIORITY APPLN. INFO.: US 2003-440772P 20030117
US 2003-356113 20030131

GI

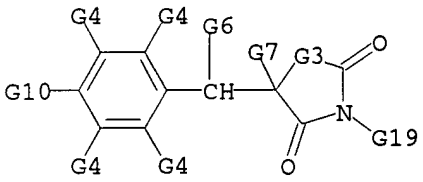


I

AB Novel amino acid Ph ethers, e.g. tyrosine Ph ethers, or tautomeric forms, stereoisomers, polymorphs, pharmaceutically acceptable salts, or pharmaceutically acceptable solvates thereof [I; wherein the dotted line represents an optional double bond; Y = O, S, NR (wherein R represents hydrogen or alkyl); Z = O, S; R1-R4 = H, halogen, HO, nitro, cyano, formyl, amino, alkyl, alkoxy; A = a bond or substituted or unsubstituted aryl, heterocyclyl or heteroaryl ring; X = an alpha aminocarboxylic acid or alpha aminocarboxylic acid derivative bonded to A or Y through its alpha side chain] are prepared Also provided are a method for reducing glucose, free fatty acids, cholesterol, or triglyceride levels in plasma,. These compds. inhibit cytokines such as TNFα, IL-6, and IL-1β and

exhibit activity for the treatment of immunol. diseases mediated by cytokines, autoimmune diseases such as multiple sclerosis and rheumatoid arthritis, inflammation mediated by cyclooxygenase, obesity, hyperlipidemia, hypertension, neurol. diseases and diabetes, or a disorder associated with insulin resistance. Unlike other thiazolidine-compds. (TZD mols.), the compds. I exhibit no adipocyte differentiation, reduce body weight gain, and appear to have no affinity for PPAR-g and thereby are different from known TZD mols., which typically have adipocyte differentiation activity, increase weight gain, and are PPAR-g agonists. Thus, Me 2-[(tert-butoxycarbonyl)amino]-3-(4-hydroxyphenyl)propanoate was treated with NaH in DMF and etherified with 4-Fluorobenzaldehyde at 80° to give Me 2-[(tert-butoxycarbonyl)amino]-3-[-(4-formylphenoxy)phenyl]propanoate which was condensed with 2,4-thiazolidinedione in the presence of benzoic acid and piperidine at 145-155° under reflux with continuous removal of water using Dean-Stark apparatus for 5 h followed by treatment with HCl in CH2Cl2 to give 5-[4-[4-(2-amino-2-methoxycarbonylethyl)phenoxy]benzylidene]thiazolidine-2,4-dione hydrochloride (II). Catalytic hydrogenation of II over Pd/C in methanol gave 5-[4-[4-(2-amino-2-methoxycarbonylethyl)phenoxy]benzyl]thiazolidine-2,4-dione (III). III lowered pro-inflammatory cytokines in human macrophage cells and in an animal model of inflammation inhibited carrageenan-induced paw edema in SD rats.

MSTR 1



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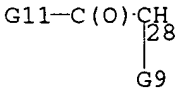
G8 = 28



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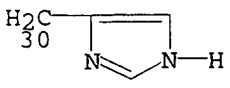
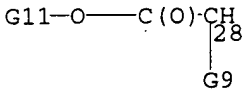


MPL: claim 1
NTE: and tautomers, polymorphs, and pharmaceutically acceptable solvates
STE: and stereoisomers

MSTR 2

G10—H

G1 = NH
G8 = 28



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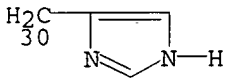
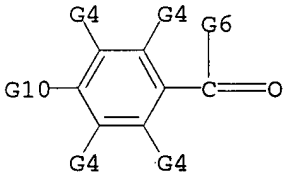


MPL: claim 18

MSTR 3



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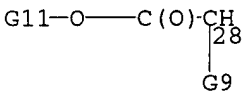

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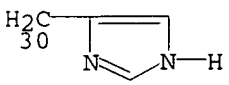

MPL: claim 18

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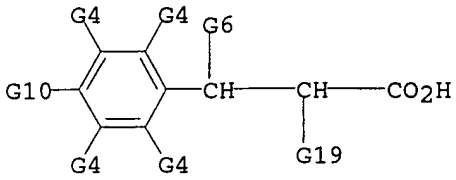

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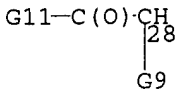

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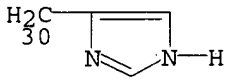

MPL: claim 19

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT